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ABSTRACT

These conference proceedings contain 17 presentations covering aspects of undergraduate instruction in psychology. Along with an introduction and conference program, the proceedings present: (1) "Paired Psychology and Reading Course at Medgar Evers," by Gloria G. Loewenthal and Thomas O. Edwards; (2) "Thinking through Psychology and Literature: An Interdisciplinary Approach," by Andrea S. Zeren and Nancy A. Lusignan; (3) "Teaching Psychology of the Arts: Two Course Histories," by Katherine Stannard and Joan DiGiovanni; (4) "Write Now: Encourage Clear Thinking," by Joan C. Chrisler and Climeen Wikoff; (5) "Behavior Modification Programs for Mentally Retarded Clients: A Practicum Course," by William R. Balch; (6) "The Psychology Practicum: An Administrative Model," by Debra K. Stein and Robert T. Tauber; (7) "The Strange Case of the Disappearing Student: A Psychodynamic Approach to Understanding and Teaching the Undergraduate Psychology Student," by Marjorie Gelfond; (8) "The Classroom as Theatre: Alternatives to Exams," by Eileen T. Brown; (9) "An APPLE for the Student," by Regina Rumstein; (10) "A Rotational Team Teaching Model for Introductory Psychology," by Henry C. Morlock and others; (11) "Infusing Black Psychology into the Introductory Psychology Course," by Lisa Whitten; (12) "On Motivating the Unmotivated Student," by Joan D. Atwood; (13) "Teaching the History of Psychology by a Major Questions Approach," by Mark C. Gridley; (14) "Behavioral Statistics: A Slightly Different Approach," by Robert Karlin; (15) "Introducing Computers into the Curriculum," by Margaret D. Anderson; (16) "Affective Teaching: Issues We Should Reconsider," by Linda L. Dunlap; and (17) "On the Use of Process in Education," by Ellen Ross. (EJV)

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Teaching of Psychology: Ideas and Innovations
Proceedings of the Conference
held
March 27, 1987
at the
State University of New York College of Technology
at Farmingdale

Judith R. Levine, Editor
SUNY College of Technology at Farmingdale

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INTRODUCTION

In 1985, a Curriculum Review Team which evaluated the Psychology Department (in conjunction with the periodic review by the Middlestates Accreditation Association) recommended that the Psychology faculty at SUNY Farmingdale meet with their counterparts from other local colleges to exchange ideas and information of mutual interest and benefit.

From this recommendation the conference "Teaching of Psychology: Ideas and Innovations" was born. The conference was intended to have a practical emphasis. It brought together individuals who were concerned with the quality of the teaching of undergraduate psychology so that they might share their specific ideas, innovations, and recommendations for improving the quality of the teaching/learning process.

The relatively small size and narrow theme of the conference made this sharing possible on both a formal level (the paper sessions) and an informal one (in conversations over coffee, lunch, or wine and cheese).

This one day conference was held on March 27, 1987 on the campus of the State University of New York College of Technology at Farmingdale. The conference was attended by approximately 80 individuals, some coming from as far away as Massachusetts and Minnesota. There were a total of 26 presentations, including the keynote address by Dr. Dennis Coon, 1 panel discussion, 3 workshops, and 21 papers. Seventeen of the presenters have agreed to include their presentations in these conference proceedings.

The conference was considered by all involved to be an unqualified success. Plans for a second conference are well under way and we intend to make this an annual event. The success of this conference was due in large measure to the efforts of the following individuals: Dr. Stanley Feist and Dr. Nancy Philips, my fellow conference coordinators; Ms. Kristina Clenaghan of the Division of Continuing Education, and Ms. Barbara Sarringer, Secretary of the Department of Psychology.

Judith R. Levine, Ph.D.

STATE UNIVERSITY OF NEW YORK
-----FARMINGDALE-----

The Psychology Department in cooperation with the
Division of Continuing Education presents

A Conference On Undergraduate
TEACHING OF PSYCHOLOGY: IDEAS & INNOVATIONS

CONFERENCE PROGRAM: FRIDAY, MARCH 27, 1987

- 8:45- 9:45 a.m. REGISTRATION-- ROOSEVELT HALL, LOBBY
 Coffee & cake
 Textbook Displays
- 9:45-10 a.m. WELCOME
 Dr. Frank Cipriani
 President, SUNY Farmingdale
- 10-11 a.m. KEYNOTE ADDRESS
 Demystifying the Paranormal.
 Skepticism & Student Gullibility
 Dr. Dennis Coon, Teacher of Psychology,
 Textbook Author and Lecturer

11:05- 12:35 CONCURRENT SESSION I

room 109 Panel Discussion: PRESIDER, Roger Hoffman, SUNY Farmingdale

PRODUCING AN INTRODUCTORY TEXT: DIFFERING PERSPECTIVES.
Robert Feldman, Univ. of Massachusetts, Author
Rhona Robbins, McGraw-Hill Book Co., Editor
David Griesse, SUNY Farmingdale, Reviewer

Loft Lounge Workshop: PRESIDER, Marilyn Blumenthal, SUNY Farmingdale

LIFE SCIENCES LABORATORY: COMPUTERS AND
THE COMPUTER-NAIVE PSYCHOLOGY MAJOR.
J.W. Whitlow, Jr., Rutgers University

room 111 Paper Session: PRESIDER, Pearl Brod, SUNY Farmingdale,

11:05-11:35 PAIRED PSYCHOLOGY & READING COURSE AT MEDGAR EVARS
COLLEGE.

Thomas O. Edwards & Gloria Lowenthal,
Medgar Evars College.

11:35-12:05 THINKING ABOUT PSYCHOLOGY & LITERATURE: AN
INTERDISCIPLINARY APPROACH.

Andrea S. Zeren & Nancy A. Lusignan,
Salem State College

12:05-12:35 TEACHING PSYCHOLOGY OF THE ARTS: TWO COURSE HISTORIES.
Katherine Stannard, Framingham State College,
Joan LiGiovanni, Western New England College

12:45-1:45 LUNCH-- KNAPP HALL

1:50-3:20

CONCURRENT SESSION 2

Loft Lounge Workshop PRESIDER, Judith R. Levine, SUNY Farmingdale

WRITE NOW ENCOURAGE CLEAR THINKING

Joan C. Chrisler, SUNY Purchase

Climeen Wikoiff, Columbia University

room 111 Paper Session: PRESIDER, Paul Bedell, SUNY Farmingdale

1:50-2:20

BEHAVIOR MODIFICATION PROGRAMS FOR MENTALLY
RETARDED CLIENTS: A PRACTICUM COURSE.

William R. Balch, Pennsylvania State Univ

2:20-2:50

THE PSYCHOLOGY PRACTICUM: AN ADMINISTRATIVE MODEL

Debra K. Stein & Robert Tauber,

Pennsylvania State University, Behrend College

2:50-3:20

THE UNDERGRADUATE CLINICAL CHILD PSYCHOLOGY COURSE.

BRINGING STUDENTS TO THE REAL WORLD

David Glenwick, Fordham University

room 109 a Paper Session: PRESIDER, Gene Indenbaum, SUNY Farmingdale

1:50-2:20

THE STRANGE CASE OF THE DISAPPEARING STUDENT:

AN EGO PSYCHOLOGICAL APPROACH TO MAXIMIZE CLASSROOM

TIME AND DEAL WITH THE DIFFICULT STUDENT

Marjorie P. Gelfand, County College of Morris

2:20-2:50

THE CLASSROOM AS THEATRE. ALTERNATIVES TO EXAMS

Eileen T. Brown, Medaille College

2:50-3:20

AN APPLE FOR THE STUDENT,

Regina Rumstein, Pace University

room 109 b Paper Session: PRESIDER, Pearl Brod, SUNY Farmingdale

1:50-2:20

A COURSE IN HUMAN SEXUALITY AT A TWO YEAR COLLEGE.

USE OF STUDENT FEEDBACK AS A TEACHING TECHNIQUE

Marilyn Blumenthal, SUNY Farmingdale

2:20-2:50

A ROTATIONAL TEAM-TEACHING MODEL FOR INTRODUCTORY

PSYCHOLOGY. Henry Morlock, William Gaeddert,

Naomi McCormick, Mathew Merrens,

Lary Shaffer, Taher Zandi, SUNY Plattsburgh

2:50-3:20

INTRODUCING BLACK PSYCHOLOGY INTO AN INTRODUCTORY

PSYCHOLOGY COURSE

Lisa Witten, SUNY Westbury

3:25-4:55

CONCURRENT SESSION 3

Loft Lounge Workshop PRESIDER, Marc Davis, SUNY Farmingdale

NEGATIVE REINFORCEMENT: A MISUNDERSTOOD, AND THUS
MISAPPLIED, CONSEQUENCE IN BEHAVIOR MODIFICATION
Robert T Tauber, Pennsylvania State University

room 109 a Paper Session: PRESIDER, Nancy Philips, SUNY Farmingdale

3:25-3:55

ON MOTIVATING THE UNMOTIVATED STUDENT,
Joan D. Atwood, Hofstra University

3:55-4:25

TEACHING HISTORY OF PSYCHOLOGY BY A MAJOR QUESTIONS
APPROACH

Mark C. Gridley, Mercyhurst College

4:25-4:55

BEHAVIORAL STATISTICS: A SLIGHTLY DIFFERENT APPROACH
Robert A. Karlin, Christine Joseph,
Rutgers University

room 111 Paper Session: PRESIDER, David Griesse, SUNY Farmingdale

3:25-3:55

THE INTRODUCTION OF COMPUTERS INTO THE CURRICULUM
Margaret D. Anderson, SUNY Plattsburg

3:55-4:25

INTEGRATING THE MICROCOMPUTER INTO EXPERIMENTAL PSYCHOLOGY
Suzanne R. Sunday, Nicole Schupf,
Manhattanville College

4:25-4:55

COMPUTERS IN THE PSYCHOLOGY CORE. PROGRESS TO DATE
David Bozak, Helen Daly, Douglas Lea,
Ken Rosenberg, SUNY Oswego

room 109 b Paper Session: PRESIDER, Virginia Griesse, SUNY Farmingdale

3:25-3:55

AFFECTIVE TEACHING: ISSUES WE SHOULD RECONSIDER
Linda L. Dunlap, Marist College

3:55-4:25

TAKING A STAND: TEACHING CRITICAL THINKING
Carrie Forden, Debra Swoboda, SUNY Stony Brook

4:25-4:55

ON THE USE OF PROCESS IN EDUCATION
Ellen Ross, Auburn, New York

5:00-6:00

WINE AND CHEESE SOCIAL

LOFT LOUNGE

PLEASE COMPLETE THE CONFERENCE EVALUATION SO WE MAY IMPROVE
OUR EFFORTS FOR THE NEXT CONFERENCE

PAIRED PSYCHOLOGY AND READING COURSE AT MEDGAR EVERS

Developmental Reading ENGR 004-003(004), ENRR 004-004
Gloria G. Loewenthal

Introduction to Psychology 101-004
Dr. Thomas O. Edwards

ABSTRACT

Many concerned faculty in content areas have expressed the need for refining the reading skills of some students in introductory college courses. In addition, a large number of language skills instructors have speculated that the more reading courses relate to content courses, the more transfer of reading skills will take place. To address both concerns a pilot project was organized at Medgar Evers College that paired a developmental reading course with an introductory psychology course. Basically this consisted of using the reading materials assigned in the psychology course, as well as lecture materials, to teach reading and study skills.

The long range goal of this project was to develop self-directed and efficient learners through the teaching of appropriate reading and study skills within the content of a college-level course. One immediate observable result was that all students participating in the project received passing grades in both reading and psychology courses.

PAIRED PSYCHOLOGY AND READING COURSE AT MEDGAR EVERS

Background and Rationale

Many concerned faculty teaching in content areas have expressed the need for refining the reading and writing skills of some students in introductory college courses. In addition, a large number of language skills instructors have speculated that the more the skills courses relate to content courses, the more transfer of basic skills will take place.

Student mastery of course content requires the application of skills which are specific objectives of ENGR 004 and ENRR 004 developmental reading courses. Thus, to address the concerns expressed above, it was hypothesized that pairing a developmental reading course with an introductory course such as psychology might give the academically underprepared student an opportunity to learn reading and study strategies within the context of a mainstream college course. It was felt that students would gain sound academic skills, which would help within the content course and might be transferred to content courses taken later in their college careers. An increase in the students' self-confidence was also expected, gained from the ability to succeed within a college-level course. Motivation was also expected to increase generated from the spirit found within a group studying together toward a common goal.

Long-Range Goal

The long-range goal of this project has been to develop self-directed and efficient learners through the teaching of appropriate reading and study skills within the context of a college level course. This increase in ability and motivation, it is speculated, may also lead to better student retention.

Description of Students

Students were targeted for this project who tested at the 004 reading level on the CUNY standardized reading test and whose academic major or interests indicated that psychology would be a beneficial course for them. A copy of the letter sent to such students is included in the appendix.

Fall '84

In the developmental reading class, 13 freshmen were enrolled who were also registered in the introductory psychology class. 5 additional students, who had been registered in the class without registration in the psychology class, were allowed to remain at their request.

In the introductory psychology class these 13 freshmen represented 39.3 % of the class. The remaining students were primarily other freshmen. 8.8% represented upperclassmen.

Spring '85

In the developmental reading class 8 freshmen were enrolled who were also registered in the introductory psychology class. 5 additional students, who were not registered in the psychology class, were allowed to remain and used the same materials as the other 8 students.

In the introductory psychology class these 8 freshmen represented 30.8% of the class. The remaining students consisted of 8 other freshmen and 10 upper class students. The other freshmen represented 30.8% of the class and the upperclass students 38.4%

Pre-assessment of the group's knowledge of certain pertinent basic reading and study skills (e.g., lecture note-taking, test-taking, time-scheduling) was measured by an informal questionnaire administered on the first day of the reading class. Results of this pre-assessment indicated that these students were basically unprepared in college study skills and most often were aware of this deficiency.

Structure of Paired Courses

The design for instruction in the reading skills course consisted of 2 sessions a week in a class setting and once a week in a reading lab situation where the skills were reinforced.

The format for instruction in the psychology course consisted of lectures, discussions and demonstrations.

The primary role of the reading skills instructor was the teaching of basic reading and study skills and the secondary role was to reinforce the learning of content. The primary role of the content teacher was to teach psychology concepts and the secondary role was to reinforce skill's.

In the reading classes, students learned study strategies such as PQ3R (preview, question, read, recite, review), annotating the text book, mnemonic devices or memory aids and lecture notetaking. Test preparation and test-taking methods were also taught and practiced. All of these study skills were practiced upon the actual content course material. For instance, after learning methods for taking class notes, one student each period was assigned to report back to the reading class on the notes for the preceding content class, receiving feedback from the instructor and fellow classmates. Oral reading of the textbook took place at regular intervals as well as comprehension checks on silent reading to estimate and evaluate each student's reading progress. Specialized vocabulary was taught and

retention was measured. Study guides were prepared by the instructor or by the students themselves as they attempted to anticipate the material which their content teacher might hold them responsible for. A syllabus used in the course is included in the appendix.

In the psychology class, the primary objective was to introduce students to the theories and principles of psychology while simultaneously making those abstract concepts relevant to their daily living. In other words, theory was translated to practice. For instance, in the study of memory, more consideration was given to mnemonic devices than to proactive and retroactive interference. Students often participated in "mini-experiments" devised by the instructor to illustrate concepts such as shaping by using the children's game of "Hot and Cold." When presenting topics such as problem-solving, word-association, thematic apperception, students were asked to engage in these activities. The class in general was organized to be participatory. Often students enter introductory psychology classes thinking that psychology and mental health are synonymous. They marvel when they realize the wide-range of the subfields within psychology. Therefore, constant reinforcement of the impact that psychology has had and still has on their lives has become one of the foci of each class discussion.

In order to maintain a high level of performance, quizzes were given after the completion of major chapters. Once students were

tested in these areas, this information was not retested because the intent was not that they memorize and regurgitate, but rather that they form a conceptual understanding for the purpose of applying that knowledge to daily living. A syllabus for this course is included in the appendix.

Meetings were held between the content instructor and the reading teacher at frequent intervals to discuss progress of individual students and curriculum issues. Students were aware of these meetings.

Results

To date it is reported that of the 21 students participating in this project, 100% earned passing grades in both the reading and psychology courses. This is shown in Table 1.

Table 1 also shows the DTLS score received by each student at the completion of the course. This CUNY test is no longer used as an exit instrument for developmental reading, as its primary function, as determined by the Basic Skills Committee, is as a screening device for entering students. Even as a screening instrument, it does not have complete credibility as reading speed is too major of a factor and study skills are not assessed by it. Reading educators in other branches of CUNY have also expressed dissatisfaction with this test. Although the value of this test has been discounted, it is interesting to note that 65%

of the paired group passed, as compared to an average of 45% from four randomly selected classes during the Spring '83 semester. Although not statistically significant, possibly due to unreliability of the test, an indication of reading growth may be indicated.

Reading Growth

A more important indication of reading growth can be seen in the differences found between grades and final examination scores between the paired group and students in another ENGR 004 section taught by the same instructor during the same semester. Only the scores of the paired students from the spring semester are analyzed as a comparable group did not exist in the fall. The average examination grade for the paired group was 86%, while the nonpaired section averaged 74%. The grades and scores are shown in Table 2. Also shown in Table 2 are the final grades for the two reading classes. For the final grade, letter grades were converted to numbers ranging from 2 for F to 14 for A. A t-test between the paired reading group ($\bar{M}=12.25, SD=1.39$) and the non-paired reading group ($\bar{M}=8.38, SD=3.9$) on this converted score revealed the difference to be statistically significant ($t(24.9) = 3.87, p=0$).

A t-test on the final exam grades between the paired reading group ($\bar{M}=85.88, SD=3.44$) and the non-paired reading group ($\bar{M}=73.67, SD=9.15$) revealed the difference to be statistically significant ($t(10)=3.28, p=0$).

Content Class Achievement

Comparison of these students with other students in the introductory psychology class is depicted in Table 3. An analysis of variance revealed a statistically significant difference between the freshmen in the paired course and other freshmen in the psychology course ($F(2,54) = 12.07, p=0$). Fisher post hoc comparisons revealed that the paired group differed significantly from other freshmen (non-paired) in the psychology class on their final grades. These outcomes show the importance of the fact that the paired students were learning study skills in the reading class, reinforced in the content class, that directly impacted on the content course. - It is also noted that during the spring semester 2 of these freshmen dropped out whereas no drop-outs were found in the paired group. There had also been one drop-out in the non-paired ENGR section. The better retention in the paired group may be attributed to the sense of "belonging" to the larger college community which is generated from success in a college-level course.

Table I
Grades at Completion of Paired Reading and Psychology Courses

Student	Psychology grade	Reading grade	DTLS
1.	B+	A	26*
2.	B	B	24*
3.	C-	B	27*
4.	A-	A	19
5.	C-	B	22
6.	B	A-	30*
7.	C	A-	27*
8.	C	B	21
9.	B-	B+	29*
10.	B	B	35*
11.	B-	A-	32*
12.	C-	C	30*
13.	B	B-	23
14.	A-	A-	30*
15.	C-	B-	23
16.	D	B	abs.
17.	B-	B-	30*
18.	D	C	23
19.	D	C-	25*
20.	D+	B-	28*
21.	B-	B-	22

* passing

Table 2

Comparison of Final Reading Grades and Final Reading Examination
Scores between the Paired Reading Class and an Unpaired Class

<u>Paired Group</u>		<u>Unpaired Group</u>	
Grade	Exam	Grade	Exam
A	93	B+	80
B	86	B-	66
B	83	F	62
A	86	B-	66
B	85	C+	76
A-	88	A-	84
A-	84	C+	66
B	82	B-	75
		A-	90
		C+	80
		C	77
		F	62
		F(WF)	-

Examinations were based on reading and study skills taught in both classes.

Table 3

Comparison of Paired-course Students with Other Students in the
Introductory Psychology Course

Paired-Course	Other Freshmen	Upperclassmen
B+	B	C
B-	WF	B
C	WF	C-
B-	D-	B
B	D+	C+
B-	F	C-
C-	B-	F
B-	A	C
A-	C+	C+
C-	F	C
D	D	D
B-	F	B+
D	F	
D	F	
D+	C	
B-	B+	
B	C-	
C-	C+	
A-	B	
C-	F	
C	C	
	B	
	D	
	D	

Additional Results

Not only have students learned, but also their enthusiasm has been high. A common bond seemed to develop among these students, most of whom were at MEC for their first semester. Their high motivation was evidenced in nearly perfect attendance in both classes and in comments written by these students in an informal evaluation taken in the reading class. Typical remarks on this evaluation form are listed below:

1. This course was very informative, as it has helped me to understand my psychology. It has motivated me, and I am looking forward to doing well in all my classes because of this course.
 2. It was very informative to me and helpful in my everyday reading skills.
 3. Things that I was not aware of became very clear to me, and will also be helpful to me in my future classes.
 - 4 .Between the two courses I was helped a lot and understood mostly everything I read.
 5. I found the students in this class very friendly and this helped me a lot in my studying for psychology and reading.
- A copy of this evaluation instrument is included in the appendix.

Discussion

Gloria Loewenthal and Dr. Thomas Edwards, instructors of the paired courses, are enthusiastic about the results of the pairing of these courses and acknowledge the support of interested faculty and staff who have been helpful in putting this project together. These include Dr. Elizabeth Nunez-Harrell, Dr. Raphael Zambrana, Dr. Margaret Baker-Green, Dr. Phyllis Buford, Gregory Forsythe, Acting-Registrar, and Ms. Glenna Williams of the Office of Institutional Research. Also acknowledged is the supportive advice of Prof. Beth Pacheco of New York Technical College and Prof. Al Patterson of Lehman College.

Recommendations

There certainly is evidence that these students gained in performance in both the reading and psychology courses. It is recommended that a longitudinal study of these 21 students be undertaken to determine how well these students did and will do in subsequent college content courses. A longitudinal study might also reveal whether the self-confidence and motivation which this method of instruction seemed to generate pays off in terms of continued retention. Gloria Loewenthal and Dr. Thomas Edwards are in the process of beginning the necessary research to start this study.

Other divisions have expressed an interest in pairing their introductory courses with basic skills developmental courses. The

possibility of extending this project must be examined in the light of the results of this preliminary project. So far the results of this pilot project indicate definite advantages both academically and potentially in terms of student retention.

Thinking Through Psychology and Literature:
An Interdisciplinary Approach

Andrea S. Zeren
Nancy A. Lusignan
Salem State College

Abstract

The liberal arts core curriculum is one that introduces students to the humanities and sciences. Interdisciplinary courses openly explore connections between different domains, and in so doing buttress a core curriculum's objectives by stimulating students to think more broadly about the relationships between disciplines. This paper describes an introductory psychology course coordinated with a literature course with the above goal in mind. The approach used was one of integrating the two fields via the application of psychological instruments, such as interviews and diagnostic criteria, to examine characters and issues in literary works. This technique fostered an interdisciplinary treatment of the material, as well as allowed for coverage of the content of each discipline in greater depth than would typically be presented at this level.

Thinking Through Psychology and Literature: An Interdisciplinary Approach

The idea for this interdisciplinary course grew out of a series of meetings last spring in which a few members of the Psychology Department joined in a workshop with the directors of the Salem State College Writing Center. Initially, the topic for these workshops was how to get students to write better papers and exams, but the discussions evolved to the bigger, more pertinent question: how do we get students to THINK more clearly? As instructors of General Psychology and English Composition II, we decided to design an interdisciplinary course to do just that. Our college has a liberal arts core curriculum which introduces students to the humanities and sciences. An interdisciplinary course that would explore connections between the domains of psychology and literature would make the core curriculum's implicit philosophical perspective explicit by stimulating students to think more broadly about the relationships between these two disciplines, and between other disciplines as well.

For the past two years, the Composition instructor had been working with Freshmen Developmental Skills (DS) Students at Salem State College. These students are placed in a multifaceted program on the basis of scoring below 350 on both the verbal and on the mathematical Scholastic Aptitude Tests (SAT). Although interdisciplinary courses have traditionally been developed for academically gifted students, we believed that DS students would benefit from the more intensive practice in critical thinking and expression. The interdisciplinary structure of the course provides an enhanced examination of each of the subject areas.

The classes are scheduled in tandem, so that the material presented from a scientific perspective in the Psychology class may be examined from a literary perspective in the English class. The lectures on the biological basis of behavior are supplemented with small, structured in-class experiments. These experiments are reported in written assignments requiring the students to use the publication format of the American Psychological Association.

To teach another style of critical thinking, the lectures on adolescent psychology, personality, abnormal behavior, and gender roles are augmented by illustration of these ideas in literary texts. Written assignments corresponding to lectures in these areas ask the students to analyze the literary material as it interfaces with the scientific data.

One of several in-class activities we developed uses Marcia's four identity statuses to enhance the student's interpretation of J.D. Salinger's The Catcher in the Rye. In preparation for this activity, the students first read the novel. In Psychology class they hear a lecture on Erikson's fifth stage of identity development, termed identity achievement versus identity diffusion, and Marcia's (1966) extension of Erikson's concepts into the four identity statuses.

Marcia hypothesized that there were two aspects of identity formation: (1) the presence or absence of a crisis, which is a period of engagement in choosing among meaningful alternatives and (2) making a commitment to or personal investment in an occupation, religion, and political position of one's choosing. Subsequent researchers added a fourth category, sex-role self-concept.

Marcia interviewed 86 males to assess the presence of crisis and commitment in the above areas. Based on the subject's responses, Marcia

categorized them into one of four identity statuses: Identity Achievement, Moratorium, Foreclosure, or Identity Diffuse. The lecture concludes with a summary of some of the personality traits empirically related to these identity statuses. Holden Caulfield, the main character in the novel, is examined in light of these personality dimensions.

Once the students have been prepared by their reading and the lecture, they are asked to fill out questionnaires adapted from the adult form of the Identity Status Interview (Whitbourne, 1979) to elicit responses from the students about Holden Caulfield. The students complete the questionnaires for homework, and come to class prepared to discuss their responses.

Holden Caulfield is a complex character who develops during the course of the novel. His behavior appears to vary from the beginning to the end of the book. The students, therefore, found his behavior to be inconsistent with any single category. This change in behavior is a good illustration of adolescent transition.

In addition to learning one way in which psychologists conceptualize identity, the students also discovered some of the following reasons why Holden Caulfield does not fit neatly into one of these categories: (1) the resolution of identity may not develop consistently among all areas, (2) personality is a dynamic process in which decisions are constantly being reassessed to meet new social demands, and (3) the students not only selectively interpret behavior, but selectively attend to some behaviors and not others.

The interdisciplinary course described above was successful in helping the students broaden their understanding of the relationships between psychology and literature. Teaching these domains from an interdisciplinary

perspective entailed applying psychological instruments to increase understanding of characters and issues in literary works. We used this technique to augment the lectures on adolescent personality development, but it has also be successfully applied to abnormal behavior, gender roles, and social psychology.

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TEACHING PSYCHOLOGY OF THE ARTS: TWO COURSE HISTORIES

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Paper presented at the Conference on Teaching Psychology

SUNY Farmingdale, March 27, 1987

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We are convinced that interdisciplinary studies in psychology are essential for undergraduates to understand the breadth of this field. The purpose of this study was to compare the teaching of a similar course in two different types of institution, and to make recommendations for changes when the course is repeated. Under the rubric of Special Topics in Psychology a Psychology of the Arts course was taught at two liberal arts colleges in Massachusetts, one a state college, the other a private institution. Each instructor prepared an independent syllabus (subject to the constraints of each college) but the same text was used. Although there were several variables in this study that it was not possible to control (such as scheduling, background of students), there were several features that were "quasi-controlled." These included the text and experiences offered to the students. The results of these course histories were evaluated and recommendations for improvements were made.

Both instructors are persuaded that the fine arts offer subject matter amenable to psychological study, and that this study will enrich the life of the student. The authors conclude that this interdisciplinary course in psychology of art is of value to the undergraduate student, and that the course offers an alternative (and palatable) approach for presenting basic psychological findings which may be interpreted through the vehicle of the arts.

TEACHING PSYCHOLOGY OF THE ARTS: TWO COURSE HISTORIES

Royce, in 1967 (Korn, 1985), placed psychology at the crossroads of the sciences and humanities. The differences between psychology and the arts are often blurred. For example, the visual arts involve theories of perception, motivation, development, and personality. Korn (1985) observes that psychology can share certain characteristics with the humanities such as expressive language, symbolism, involvement in life, focus on values, and imagination. He cites Koch as concluding that "meaningful psychological study will be more like the humanities than the sciences" (p. 190). While such observations might lead us to posit a "whole" psychology, such an outcome will only be found in the future. At present one method for closing the gap between the humanities and the so-called science of psychology is to develop interdisciplinary courses that form a bridge between these fields.

Williams & Kolupke (1986), observe that most interdisciplinary teaching assumes that "the crossing of disciplinary lines in liberal arts education is potentially and ideally a highly desirable thing" (p. 59). Those authors, one who taught psychology, the other English, combined forces for a course that was perceived as a highly successful component of an integrated liberal arts curriculum.

Levine (1983), a social psychologist, and a colleague in

English developed and taught an interdisciplinary course that gave the students the opportunity to read fine literature and to apply psychology to these readings. When taught with a small class of highly motivated students the course was perceived as excellent. A later offering in which the course satisfied a general education requirement and drew a larger audience was rated somewhat lower. However, the general evaluation of the course was that it provided a valuable experience in the application of psychology to the humanities.

Domino and Wechter (1976) developed and taught a psychology course on creativity, in which a studio artist-in-residence and a psychology professor combined their disciplines to produce an experimental union. The emphasis in that course was on the creative experience in art. Psychological definitions and measurements of creativity were presented. Students were also encouraged to develop a creative group project and in this way experience creativity for themselves. The course was perceived as "generally excellent" and an exciting experience for the student. In this example, the interdisciplinary context of a course is provided by the interaction of two instructors.

Nissim-Sabat (1980) describes teaching history of psychology through art and music, using examples of 19th century works to embody and illustrate the two opposing philosophical systems at that time. The course was designed for psychology majors and a single instructor provided the

information in the fields of art, music, and psychology.

The visual arts, music, and literature may provide examples of psychology in the life of a culture, and of the application of psychology to the products of a culture for both the psychology major and other students.

In an effort to provide an interdisciplinary experience for both psychology and non-psychology majors, during the fall semester of 1986 a course of the Psychology of Art was taught at two undergraduate liberal arts colleges in Massachusetts. One is a state college; the other is a private institution.

There were, of course, several differences between these two courses. These included:

1. a syllabus prepared subject to the constraints of each college;
2. credit hours and scheduling for each course (three credits in the private college, four credits in the state college);
3. number, sex, background, and age of the participants in the course;
4. differences in the background of the two instructors;
5. variations in the discussions that resulted from the differences in the two course populations.

However, the two courses had in common a required text, Invented Worlds: Psychology of the Arts by Winner (1982). Both courses examined the arts from the point of view of several theories of psychology (cognitive, behavioral, and

psychodynamic), as these applied to the creativity and motivation of the artist, and the response of the audience. Also in common were some of the experiences offered to the students. The two instructors were in frequent communication and compared the progress of the two courses. Both instructors used evaluation sheets that were as similar as the differences in the courses allowed.

The analysis of results of these course histories includes:

1. evaluation of the texts;
2. evaluation of the experiences offered to the students;
3. evaluation of methods for determining the grade for student performance;
4. recommendations for changes in teaching Psychology of the Arts;
5. comments on the value to students of a course on Psychology of the Arts.

The State College Experience

In the course taught at Framingham State College the instructor was a member of the psychology department who also had a masters degree in art. The course provided the instructor with the opportunity to awaken an almost forgotten area of study, and she derived great pleasure from it. The course was taught on an experimental basis, under the title of Contemporary Issues in Psychology, a second level psychology course that requires as a prerequisite an

introductory course in psychology.

It was decided to teach a course which would include a major component on the visual arts; a minor component on literature; and a brief session on the psychology of music. The decision to present an overview of several of the arts was made in order to avoid competition with the Art Department that is responsible for teaching the history of art, and similar courses. This decision also allowed the class to use Winner's complete text. A companion book of essays, Toward a Psychology of Art by Arnheim (1966) was also used. Arnheim's book was chosen because of Winner's frequent references to Arnheim and the issues posed in his book. The course met for a double period (110 minutes) two afternoons each week. This allowed for showing of films, longer discussions, and field trips.

The class consisted of eleven members and a female teaching assistant. Of the members all were female except one male, who subsequently faded from the scene at about mid-term without formal withdrawal from the course. (After the final exam period the instructor received a communication from the male student requesting that he be allowed to make up all the papers required. This request was denied.) Of the females, three were adults returning to college; the others were of conventional undergraduate age. There were six Psychology majors, three Art majors, one English major, and one Early Childhood Education major. (The Early Childhood major identified her background as

primarily psychology.)

The syllabus was prepared with a daily schedule of events. The first half of the course was more securely founded on the syllabus than the latter. Some class meetings were purposely left ambiguous to allow for insertion of material that met the needs of the course as it developed during the first half of the semester.

Winner's text was read completely and the schedule followed the sequence of chapters. Arnheim's book was read in connection with the format of Winner's text which meant, for a good part, a sampling of essays throughout the book.

In addition to lectures and discussions, two films were shown, and one field trip was required. The films were a visit to the Louvre Museum (not highly rated by the students), and The Maze (Maas, Young, & Gruben, 1986) which the class enjoyed very much and which led to stimulating discussion. This film explores the origins of an artist's mental illness, its prognosis, and the effects on his family and environment. The required field trip was to the Worcester Art Museum. An optional field trip to the New York Metropolitan Museum of Art was also offered to the class; only one student responded. Some students took advantage of visits to the nearby Danforth Art Museum that is formally connected with the college.

Another component of the course was the application of psychology (specifically theories of personality) to the biographies of artists. The instructor delivered three

formal papers on the lives of painters, illustrating these with examples of their work. The artists presented were Claude Monet, Pieter Bruegel the Elder, and Paul Klee. Jung's theory was used in analyzing the work of these three artists. The teaching assistant also prepared a lecture on the work of Rockwell Kent as her final contribution to the course.

The students' grades were determined on the basis of class participation and three formal papers which were read before the class. The first of these evaluated their reaction, as audience, to a work of art selected from those viewed on a field trip. Selections were made from the Danforth Museum (Framingham, MA) and the Worcester (MA) Art Museum. The second paper examined the biography of an artist interpreted by a theory of personality. Papers were presented on Warhol, Sendak, Pollock, Munch, Whistler, Van Gogh, Beethoven, Mozart, and Toscanini. Theories used included those of Erikson, Freud, Jung, Horney, Maslow, and Adler. The third paper examined the student's experience of the creative process as she engaged in the creation of a product. On this last paper, only the process description was evaluated; all creative products were accepted as of value. The projects included book-making, sculpture, a quilt, poems, a tape of a musical performance, a collage, originally designed clothing, gourmet cooking, and (for a desperate young woman) a table centerpiece of found objects.

The final meeting of the class was a brunch at which

final presentations were made and the instructor was honored by a clown who presented a bouquet of balloons and a song composed by a class member for the occasion.

At the end of the term a short evaluation sheet was used. Separate ratings were made for each text, grading method, class activities, and course content. Ratings used were excellent (4), good (3), fair (2), poor (1).

Recommendations and other comments were also requested.

A summary of the evaluations, translating from quantitative scores to qualitative adjectives, includes:

1. Winner's text--very good;
2. Arnheim's text--fair;
3. class activities--good;
4. course content--good.

Comments revealed that half of the students would have preferred more structure in the course and more field trips. The videotape The Maze received particularly favorable comment.

There was almost unanimous agreement on the components of grading and on recommending the course to another student. There was unanimous agreement (one student did not respond) that the course be repeated in the future.

The Private College Experience

At Western New England College Psychology of Art was taught under a special topics course in psychology. The course served as an introduction to the visual arts and related psychology to the art of painting, as well as the

environment in which the art is viewed. The instructor for this course had recently completed a year as Visiting Scholar at the New York Institute of Fine Arts, and in the course was able to integrate her knowledge of psychology with her acquired information on the visual arts.

In addition to Winner's text used in common with the state college, also used were Art and Visual Perception: A Psychology of the Creative Eye (The New Version) by Arnheim (1974), and Art and the Creative Unconscious by Neumann (1959). Other optional books were recommended. One of these was History of Art, (3rd ed.) by Janson (1986). The class met three times weekly, each meeting a 50 minute period.

Nine students enrolled in the course. Of these, two were non-traditional students, one in the mid 70s and the other in the early 80s. Both of these students came on the field trips. The older student had never been to a museum in his life. (He always brought his wife along to enjoy the beauty.)

Cognition and perception were emphasized and showed how one thinks visually through organizing and articulating sensory experience which is found haphazardly in the world around us. Such disorganized sensory data are found already ordered in forms of art and design. The work of Caravaggio was used as a model for visual organization. Writing assignments complemented museum experiences, lectures, field trips, and selected readings. Also considered were the

psychological factors pertaining to the museum as a learning environment.

Class discussions included Gestalt principles, analysis of personal art from the student's home, analysis of posters hung in the seminar room, and selection of campus art. Several personality assessments and art inventories were used in the class. Videotapes on the Louvre, the National Gallery of Art, and the life of Renoir were shown. The quizzes were take-home, and required the student to select one painting from a list of selected paintings to be found in a local museum, and analyze it according to ten variables discussed in the texts by Winner and Arnheim. In addition, the student had to discuss the environmental factors that were present when the chosen work was viewed. Museums included the Springfield (MA) Museum of Fine Arts, the Smith College Museum of Art, and the Boston Museum of Fine Arts. Each was subsequently the subject of class discussion. This was an excellent experience since during the discussions it became clear how much one brings of oneself in viewing a painting. Field trips were made to the Metropolitan Museum of Art and the Museum of Modern Art in New York, to the Museum of Fine Arts and Gardner Museum in Boston, to the Fogg Museum at Harvard University, and to the Homer Exhibit in New Haven, Connecticut. Post-course activities were planned. These included attendance at the Annual Meeting of the Eastern Psychological Association and tours of museums in the Washington, D.C. area.

An important assignment was the psychohistorical evaluation of an artist selected by each student. As a model the instructor gave a formal class presentation, "Caravaggio's Aggressive Personality," using aspects of Freudian psychology in the analysis of the artist's work. Following the instructor's model, the student acquired information concerning the chosen subject by conducting a computer search of Psychological Abstracts and Art Modern. During the last two weeks of the course eight students gave 20-minute presentations on an artist's life, showing selected works by that artist, some adding a musical background to the slide show. An abstract of the paper and a list of slides were distributed for each presentation. Artists whose life and work were presented included Monet (the early and late years), Picasso, Michelangelo (painting and sculpture), Adams, and Van Gogh. The remaining student gave a presentation on children's art.

The summary of the formal evaluation of the course (using the same rating scale and items as in the state college) was as follows:

1. Winner's text--excellent;
2. Arnheim's text--fair;
3. Neumann's text--fair;
4. class activities--excellent;
5. course content--very good.

There was unanimous approving agreement on the methods of grading. The supplementary evaluation sheets (required of

each student at Western New England College) and the Student Instructional Reports were uniformly enthusiastic about the content and methods used in the course. The class size was considered optimal, and the learning opportunities and methods of evaluation were highly approved. It was suggested that music as an art be included in a future course, and that more field trips would be desirable. A final comment: We not only learned a lot, but we had fun too!

Conclusion.

In general both courses may be regarded as successful. Each instructor provided different experiences for the students, and in later discussion, agreed that features of each course might well be reciprocally incorporated into the other. For example, more field trips were desired in one case; the other course that incorporated a variety of museum visits found these extremely beneficial. It was also proposed in one case that arts other than the visual be incorporated into the syllabus; the instructor who provided this variety found that other arts (such as the dance) were regarded as desirable additions to course content.

A primary value of this course in the psychology of the arts was learning about the interaction between the two disciplines. Also important was the application of psychology to the field of the fine arts. The fields of psychology that were applied to art included sensation and perception, personality, cognition, development, and

abnormal psychology. Another value of a course in the psychology of the arts proved to be a greater understanding and appreciation of arts, artists and the creative process, and the effects of arts on society. These results, in our view, are a step in "closing the gap between the humanities and . . . psychology" as Korn (1985) proposed.

Students commented on the value of looking beyond the work of art to the meaning of the work and the motivation of the artist, and to understanding the human need for art for both the creator of art and the audience. The opportunity of experiencing the act of creation for themselves was also highly regarded by the students and resulted in a camaraderie among the students and between the students and the instructor.

The small number of highly motivated students in both of these courses was apparently a factor in the student perceptions of these two courses as, on the whole, excellent. It remains to be seen what the evaluation might be if a course in psychology of the arts were made a general education requirement or were taught to a larger class size. Levine's (1983) experience leads us to approach such a change with caution.

One factor that made these two interdisciplinary courses unusual was the leadership of one "interdisciplinary" instructor in each case, as in the course described above by Kassis-Sabat (1980). The success of this type of instruction lies to some extent in the flexibility provided

when only one individual is responsible for course planning; adaptations of the syllabus are readily made and can take advantage of unforeseen opportunities for study, as in field trips, for example.

Our own belief is that the course in psychology of the arts was well worth presenting, and agree with Williams and Kolupke (1986) that crossing interdisciplinary lines is a highly desirable thing. Although several improvements can be made, both the students and the instructors found the course a valuable experience and recommended that it be repeated in the future.

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Write Now: Encourage Clear Thinking

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Abstract

In this paper, a writer and a psychologist examine the links between the acts of writing and thinking, and discuss ways of encouraging students to do more of each. Practical examples of writing assignments are provided, and grading styles are discussed.

Theory (CW)

As a writer working with a psychologist who uses writing in the classroom, I have become interested in the theory and practice of writing as a tool for thinking and learning. As any writer can tell you, writing is, indeed, a powerful tool for thinking. Quite often, writers do their thinking with pen in hand (or at their word processors). Many writers freely admit to being led by their writing, not knowing precisely where they are headed until their writing takes them there.

Elbow (1973) tells his students that "meaning is not what you start with, but what you end up with." Elbow and Fulwiler (1982) advocate the need to trust the process of composing, to make choices as they present themselves. The choices made "tend to dictate those that follow, and gradually a pattern begins to emerge, and the constellating fragments fall into place." (McCrimmon, 1976)

There is a growing body of research aimed at understanding the mental processes behind writing. This process research borrows from the methods of psychology as the researchers study writers at work: analyzing their doodles and drafts, interviewing them at every step of the process, recording them as they think aloud while composing.

One outcome of this research has been a clearer understanding of the relationship between thinking and writing, which are more closely interwoven than was

conventionally believed. "The old notion that writing is the end product of thinking, the transcript of already formulated thought, gave rise to the maxim, 'Think, then write'." (Walvoord and Smith, 1982) Students were told to come up with a topic, make an outline, and then write the paper. Unfortunately, that's not how successful writers work. When an outline is used at all, it usually arises later in the process. As Elbow (1983) maintains, outlines are more useful during revision than at the beginning of the process "because finally there's something rich and interesting to outline."

Writing is not a linear process, but one of continuing review and revision. One has an idea and puts it on paper, and this, in turn, generates more ideas. Gradually, with careful analysis, the words and ideas are manipulated, arranged, rearranged, and organized until a coherent structure is shaped, with the finished pieces often bearing little resemblance to the initial scribbles.

It is precisely this ability to manipulate our thoughts on paper which led Emig (1977) in her influential article to insist that "writing represents a unique mode of learning." By enabling us to make our thoughts concrete and visible, writing allows us to develop and extend them beyond our normal capabilities. Writing not only gives us the luxury of putting our ideas aside and returning to them refreshed, it also allows us to look at our ideas from new angles and perspectives.

Emig (1977) considers writing uniquely suited to learning because of four major points of correspondence between the two: both learning and writing are multi-faceted, using eye, mind and hand; both profit from self-provided feedback; both serve to structure and organize ideas and information; and both are -- at their best -- active, personal and engaged. When she speaks of writing as being multi-faceted, Emig is building on the work of Jerome Bruner, who posits three ways that people come to understand the world: enactive, by doing; iconic, by making a picture or image; and symbolic, by restating in words. In writing, of course, all three methods of dealing with reality are simultaneously employed. An experience is transformed into words (the symbolic mode), which are shaped by the hand (the enactive mode) into visible writing on the page (the iconic mode). This "symbolic manipulation through written language provides a way not only to represent experience, but also to transform it." (Yinger, 1985)

If learning profits from feedback, then writing, with immediate access to both product and process, is a powerful tool for learning. Traditionally, feedback is recognized for its reinforcement function, but it also provides information for further modifying product and process. As I look at what I write, I can decide if it expresses what I mean, and, if not, I can make the appropriate changes. While this type of feedback is immediate, it can also be long term. Through writing, my ideas are captured on paper where I can return

to them whenever I choose. I have, in effect, a record of their development and evolution.

The premise, that writing and learning both serve to structure and organize ideas and information, needs little explanation. "Learning," says Yinger (1985), "requires establishing connections and relationships; people learn as they relate new information to what they already know." Writing organizes information in similar ways. The establishment of systematic and explicit relationships are a necessary component of writing.

Finally, at their best, writing and learning both are personal, active and engaged. Emig (1977) calls this personal engagement "self-rhythmed", and notes, "One writes best, as one learns best, at one's own pace." Jean-Paul Sartre gave up writing when he lost his sight. Explaining why he found it impossible to use a tape recorder, he said, "There is an enormous difference between speaking and writing. One rereads what one rewrites. But one can read slowly or quickly: in other words, you do not know how long you will have to take deliberating over a sentence....If I listen to a tape recorder, the listening speed is determined by the speed at which the tape turns, and not by my own needs. Therefore, I will always be either lagging behind or running ahead of the machine." (Emig, 1977)

Although any type of writing is useful in the classroom, different types serve different purposes. Individual researchers have proposed that some types are

more beneficial to certain modes of thinking than others. For instance, Elbow (1983) believes that writing can be used to teach thinking in two ways, or, as he puts it, to teach two kinds of thinking, which he calls "first and second order thinking." First order thinking is creative and intuitive, while second order thinking is directed and conscious; both have their strengths and weaknesses. Free-writing and fast, exploratory writing are two methods that Elbow uses to teach first order thinking. Careful, thoughtful revision is the method he uses to teach second order thinking.

In his extensive research, Britton (1975) has classified writing according to its function as transactional, poetic or expressive. Most of the writing done in schools is transactional writing, such as the term papers, essays and note taking which aim to inform or instruct. Poetic writing is simply creative writing, language functioning as art. Expressive writing is essentially written to oneself in the form of diaries or journals.

Expressive writing, according to Britton (1975), is the closest thing to the thinking process itself, and is the source from which poetic and transactional writing stem. A useful tool for trying out new ideas, expressive writing also promotes independent thinking. Yinger (1985) also discusses expressive writing in the form of journal writing as a means of enhancing awareness, clarifying emotions and

feelings, and as a "window to process." Through expressive writing, Yinger (1985) states, students "can become aware of not only what they know and how they feel, but of what they do and how they do it."

Poetic writing, which is traditionally not used much outside of English classes, can also promote significant learning. This has been demonstrated by Young, Gorman and Gorman (1982) who assigned introductory psychology students to write a poem about schizophrenia. They found that poetic writing "was most effective at getting students to write from a schizophrenic's point of view and to move inside a schizophrenic's head." The students themselves believed that the poetic writing exercises had enabled them to look at schizophrenia from a different, more sympathetic perspective than simply writing an essay would have.

Transactional writing, of course, has its own benefits. For instance, Howe (1970) found that students who take notes during class lectures recall more ideas from the lecture than do students who simply listen. Howe and Godfrey (1977) observed that test scores of students who spent time recopying their notes before a test scored significantly higher than those who did not. In a study "designed to determine if student learning in college General Chemistry could be increased through the addition of required writing assignments", Horton et al (1985) observed that the students who wrote summaries of the class lectures scored significantly higher on the final exam than did the students

who did not write summaries. Although the researchers were unable to determine if the gains were "due to the processes involved in organizing and writing the summaries, or due to the additional study time required to write the summaries", I don't think it matters. The important thing is that even by writing something as simple as notes and summaries of class lectures, students were able to learn more.

In recent years, transactional writing has come under fire by researchers such as Britton (1975) and Freisinger (1982) who think that it inhibits independent thinking by directing attention toward classificatory writing, which merely reflects information. Says Freisinger (1982), "Excessive reliance on the transactional function of language may be substantially responsible for our students' inability to think critically and independently...Product-oriented, transactional language promotes closure."

Our response to such criticism is not to throw out any type of writing which can aid learning, but to rely not on transactional writing alone. To encourage independent thinking, the creative instructor will assign expressive, poetic and transactional exercises. This can be done on any level, in any content area. In a few moments, we'll have some suggestions about how you can work such assignments into your syllabus.

Practice (JCC)

Since "thinkers and writers become better thinkers and writers by thinking and writing" (Eble, 1976), it seems clear that frequent short writing assignments will do more to develop students' skills than will the traditional end of term paper which can be so easily purchased or plagiarized. "Although 'Look it up' is not bad advice, 'Think about it' is even better" (Eble, 1976), and professors can give such advice on a regular basis, requesting brief written summaries of the students' thoughts about lecture topics, demonstrations or experiments. Keeping the assignments brief allows the students to complete more of them, since fewer hours of library research are required, and also allows the professors to read and return them within a few days.

There are several ways to go about organizing the students' writing assignments. Bennett (1985) suggests coordinated teaching of introductory psychology and basic composition. She teamed up with an English professor, and they arranged to have their classes meet in the same room, one after the other. Composition assignments and classroom exercises were based on the material the students had just studied in the psychology class. Student evaluations were enthusiastic, reporting that the classes stimulated their interest in both subjects, and that the students believed that they had learned more about psychology through writing about it.

Beers (1985) suggests a portfolio assignment which accounts for 40% of the course grade. Students are informed

early in the semester that they will be required to turn in 15 typewritten pages of writing during the course. Students are required to include at least one summary of a book or journal article with a discussion of its relevance to the course. The rest may be made up of autobiographical writings, essays on controversial topics covered in class, or short stories or poems inspired by the topics of the course. Portfolios are collected several times during the semester so the instructor can comment on drafts of work in progress. The majority of her students rated the portfolio assignment as quite useful. However, very little creative writing appeared in the portfolios. Given the choice, students will write autobiographical essays and summaries of articles or books.

To get students in the swing of writing, in-class free writing exercises are useful. Marcus (1980) suggests the following: (a) at the end of class, writing down several words of importance to the lecture, defining them and explaining why they are important; (b) a 3 - 5 minute free write on the topic of the day's class to prepare for discussion; (c) preparing for a lab exercise by writing down exactly what is to be done, the steps to take, what it attempts to demonstrate, and any questions or concerns about the exercise; (d) "postwrites" to sum up or react to a lecture, lab exercise, discussion, chapter, or audiovisual material. The major benefits of such assignments are that they get the students used to writing regularly, they are

part of the class and contribute to the student's understanding of it, and they do not require the instructor's time for reading and grading them, although they can be collected from time to time to make sure that all the students are actively participating in the assignments.

Following are some suggested assignments you can use. I generally expect about six short written assignments plus one longer paper in a semester course. The short assignments plus class participations count for 25% of the course grade, the longer paper for another 25%.

Term Papers

- Instead of picking a topic to write about, pick a question to answer. Encourage a mix of library research, personal experience, and interviewing.
- Read a biography and discuss the person's life in terms of major psychological theories of personality and development (e.g. Freud, Erikson, Maslow).
- Read a novel, biography or autobiography about a person with mental illness. The term paper should be written up as a case report on the main character, answering the following questions: What are the character's symptoms? What diagnosis would you assign? What type of therapy did the character receive? What type would you recommend and why? Which theory best describes the development of the character's mental illness?

Verse

- Write a verse or acronym to help you remember the parts of the brain.
- Write a poem about what it means to be young or old.
- Pick a person you have strong feelings about and describe his/her personality in verse.
- Write a poem about schizophrenia or a schizophrenic's experience from a humanistic-existential point of view (Young et al, 1983).
- Write a poem reflecting on normality vs. abnormality.
- Write a poem about experiencing an anxiety attack.

Essay

- Write an essay on whether you think you are mostly right or left brained. Why?
- Pretend to be a person without sight or hearing, and describe how you would handle a specific situation (e.g. doing laundry, going to the movies).
- Pick a specific task and describe it using information from the major sensory systems (e.g. peeling a piece of fruit).
- Write about some of the important role models in your life. What have you learned from these models? What attracted you to model your behavior on these particular people?
- Write an essay about whether experimental animals have acquired language.

- Write an essay about what motivates you.
- Write an essay on whether you are a Type A or Type B person. Give examples to support your ideas.
- Describe a recent stressful experience. What happened? How did you feel? What did you think? What did you do? What coping devices did you use or should you have used?
- Write an essay comparing and contrasting the three major theories of personality. Which do you prefer?
- Write an essay discussing the various treatments for psychotic illnesses. Which are best? What treatment would you want if you should become mentally ill?
- Write an essay describing a peak experience as vividly and accurately as possible. Where were you and what were you doing? How did you feel during and after the experience? What did the experience mean to you then and now?
(Polyson, 1985)
- Write an essay focusing on a particular episode of a television show. Use the first paragraph or two to describe the situation, then use a personality theory to explain why a character behaved as s/he did (Polyson, 1983).

Notes, Outline, Key words

- Spend three minutes concentrating on a particular sense (e.g. hearing, touch, smell) and write down all the information you can get from it.

- Outline a conditioning experiment without necessarily carrying it out (e.g. self-change, training a pet).
- Creativity exercise on product improvement: Give groups of students common objects for which to outline improvements. They can work on their own for 10 minutes, then join a discussion group to share ideas and outline final improvements. LaVoie (1981) suggests choosing random key words to stimulate planning.
- To facilitate discussion, ask students to jot down key words or phrases (e.g. What is intelligence?).
- Choose a habit you would like to change and outline a plan for changing it.
- Write rational arguments against several of Ellis' irrational beliefs (e.g. It's easier to avoid than to face life's difficulties, I must be loved and/or approved of by every significant other in my life).

Journal

- In a Consciousness course: record interesting dreams, drug experiences, meditation experiences, results of attempts at relaxation techniques, self-hypnosis or biofeedback, as well as unusual experiences such as absentmindedness, time-gap experiences, flow experiences, ESP, or deja vu.
- In a Cognitive Psychology course: record instances where you realize that you have forgotten something. Write down relevant aspects of the situation and try to explain why the forgetting occurred. Include in your journal

instances of suddenly remembering information. Describe what that situation was like (Terry, 1984).

Book Reviews

- Students should be instructed to jot notes, ideas, and reactions as they read and later combine these to form the paper. If plagiarism is a concern, the students' notes can be appended to the papers.
- Limit book reviews to controversial topics and/or authors to stimulate independent thinking. Some of our favorite assignments are Walden Two or Beyond Freedom and Dignity by B.F. Skinner for a Learning course, The Origin of Consciousness in the Breakdown of the Bicameral Mind by Julian Jaynes for a Consciousness course, and Pornography: Men Possessing Women by Andrea Dworkin for a Sex Roles or Social Psychology course.
- For a Motivation course: read and review a popular motivational book, anything from Norman Vincent Peale or Anne Morrow Lindbergh to "How to be your own best friend" or "The new assertive woman". Discuss the book's relationship to psychological theory. Evaluate the advice given to readers.
- For a Health Psychology course: read and review a popular diet book. How healthy is the advice given to readers?

Reaction Papers

-Hypnotize the class or induce relaxation in some other way.

Ask the students to write about the experience. What did it feel like?

-After a discussion of a controversial topic such as

Gardner's theory of multiple intelligences, ask students to write about their reactions to the ideas. What do you think of this theory?

-Act like a nonconformist. Describe what you did, how others reacted to you, and how you felt.

-Describe a situation to the class and ask them to write down their reactions to it. These reactions can then be shared in small group discussions, and each group can report a prototypical reaction to the class. (Example: in a Health Psychology class, pretend to be the students' physician, and tell them that their test results show a terminal illness.)

APA Style Papers

-Ask students to conduct a simple learning experiment and write it up formally. This can be a class project where they share the data, but write individual papers.

Short Story

-Write a short story based on your earliest memory or on how a memory lapse has gotten you into trouble.

- Write a short story about incidents in the life of someone very young or old.
- Write a short story about someone experiencing an anxiety attack.
- Write a short story about being the object of discrimination. How did you feel about the people who were prejudiced against you?

Lists, Questions

- Write a list of all the questions you would like to have answered about, memory, sleep, etc.
- Creativity exercise: show the class a picture and ask them to write down as many questions about the picture as they can in 5 minutes.
- Write questions or statements for a personality test that would distinguish a normal personality from an abnormal one.

Letters

- Write a letter to a friend describing grief or intense joy.
- Write a letter to a friend describing what it feels like to be schizophrenic or manic-depressive.
- Write me a note telling me what you think the mid-term or final exam should be like. What format would work best, what topics are most important to cover. Include sample questions if you want to.

-Write a letter to the author of your text expressing your opinion/disagreement on the way a topic was presented (Tchudi, 1986).

Abstracts

-For extra credit in a General Psychology course: write abstracts for behavioral science articles you read in the popular press (e.g. Time, Newsweek, the Tuesday New York Times).

-Write a 1-2 page abstract of a journal article you have located yourself that deals with information we have recently discussed in class. Include a one paragraph critique of the theory or research design (Klugh, 1983).

Professors outside of English departments worry about how to evaluate the writing submitted by students in their classes. Although I always edit when I read student papers (I correct spelling, circle typos, and suggest better wording for awkward sentences.), I believe that a grade should be assigned based on whether or not the students have clearly explained their points of view. In other words, it's not necessary to be an expert grammarian to evaluate students written work.

In fact, Tchudi (1986) thinks that it is a mistake for non-English professors to comment at all on grammar, spelling and sentence construction, except when it is so poor as to impede the reader's understanding of the

student's points. In such cases, instructors should write such comments as, "I lose your train of thought here" or "It's not clear what you mean by this." Tchudi also suggests having students edit each other's work, followed by the professor's comments on both the original and the editing, e.g. "Sue has a good point here" or "I don't agree with Jim; I think your phrasing is fine."

Although I understand the point that Tchudi makes, that insecure writers may be frightened by a sea of red ink, and that unless the corrections are on a first draft, the student is unlikely to learn much from them, I continue to make corrections. Although some students' writing does not improve over the course of the semester regardless of the time I spend correcting it, the writing of other students does. Some are motivated to improve, and to reduce the amount of red ink on future writing samples. I always include positive comments in the margins and on the bottom of student papers to provide encouragement and to counter negative feelings my editing may have aroused. I also draw smiling faces on particularly good papers and tests and frowning faces on poor ones. College students react surprising well to this device, sometimes expressing disappointment because I didn't smile over a particular assignment and frequently drawing their own smiles and frowns on the bottom of test papers to indicate whether or not they found the test fairly constructed.

To sum up, We encourage you to add more written assignments to your syllabus. Vary the formats to challenge the students and to stimulate their creative thinking. Keep the assignments short and you will not be overburdened as you read them. Remember that the best way to improve writing and thinking is to write and think.

We'd like to close with an anecdote from Gregory Bateson (1979).

A man wanted to know about mind, not as in nature, but in his private large computer. He asked it (no doubt in his best Fortran), "Do you compute that you will ever think like a human being?" The machine then set to work to analyze its own computational habits. Finally, the machine printed its answer on a piece of paper, as such machines do. The man ran to get the answer and found, neatly typed, the words: "That reminds me of a story."

May all your students become good storytellers!

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Behavior Modification Programs
For Mentally Retarded Clients: A Practicum Course

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Running Head: Behavior Modification Programs

Abstract

With the cooperation of the administration and of the staff psychologist at a local facility for mentally handicapped clients, undergraduate students in this practicum course helped design and implement behavior modification programs for some of the clients. The course provided the students with effective training in behavior modification and in the writing of a research report. It also provided an opportunity for the students to acquire a professional reference and job-related experience. Considerations in adapting this type of practicum to other teaching situations are discussed.

Behavior Modification Programs for Mentally Handicapped Clients:

A Practicum Course

In the course described in this paper, each of eight enrolled students undertook a behavior modification project with a different mentally handicapped client. These projects were carried out at the Altoona Center, a facility for mentally impaired individuals, under the supervision of a psychologist at that facility. This practicum course was developed in response to (a) student interest in obtaining experience in applied psychology, and (b) a need at the Altoona Center for capable and motivated assistants to work with clients. In addition, I viewed these programs as an opportunity for students to gain first-hand experience in research methodology and report-writing.

Other instructors may find this type of course useful and interesting for their own students, provided that arrangements with a suitable institution or service group can be arranged. With that purpose in mind, I will describe the organization of the course, discuss the nature of the programs and papers undertaken by my students, and provide an example of the results achieved in one of these projects. Finally, I will evaluate the course in terms of the responses of the students and the benefits they derived from their experiences with the practicum.

Course Organization

During the Spring Semester of 1986, the practicum was offered as a one semester-credit Independent Projects course at the Pennsylvania State University, Altoona. It was opened to students who had already enrolled in my developmental

psychology course (and would also be suitable for students enrolled in courses on learning or on the psychology of adjustment). I announced the opportunity to participate in the practicum on the first day of the semester, and pointed out that travel to and from the Altoona Center was the responsibility of the students. All eight students who registered for the practicum had already taken an introductory psychology course, and all were first or second year undergraduates.

The supervision and on-the-job training of each student project was provided by Mr. Joseph Caputo, a psychologist at the Altoona Center. He was assisted in these tasks by a graduate student from the Indiana University of Pennsylvania, who was then interning at the Center. This arrangement made it possible to accommodate the eight student participants without difficulty. However, I would recommend fewer students in situations where less supervision was available.

Course grades for each student were based on two equally weighted criteria. One was an on-the-job performance rating by their supervising psychologist, Mr. Caputo. The other was the quality of a written project report, which all but one student submitted to me at the end of the semester and which I graded. The student who did not turn in a report withdrew from the course, although she did choose to finish her behavior modification sessions with her client.

Reports were required to be typed, to be written in APA style, and to include graphs or tables summarizing the results of the behavior modification projects. To help students prepare papers of reasonable quality, several steps were taken. First, a few key articles were assigned by the Altoona Center

psychologist as reading for each student. This step greatly simplified the literature search process. Next, the students had the option of letting the psychologist review a first draft of their papers and make comments, before submitting their papers to me. Finally, I held periodic sessions with the students to provide instruction and to answer questions on report writing and on APA style. In particular, I explained the use of references and their citation in the text of the report. I also discussed the functions of the various parts of a report, including the abstract, the introductory section, methods, results, and discussion.

Approximately the first week of the course was spent on orientation. Each student met with the psychologist at the Altoona Center and toured the facility. A list of clients who needed programs, with descriptions of the behavioral problems of each, was provided. Students could see a client, if they wished, before deciding whether to work with that individual. On this basis, students were matched one-on-one with the clients. At this point, the supervising psychologist assigned readings to students, based on the nature of that client's individual behavioral problem. Most of the books or articles assigned emphasized the application of schedules of reinforcement, and the treatment of specific problems, such as self-injurious behavior (e.g., Azrin & Wesolowski, 1980; Azrin, Besalel, & Wisotzek, 1982; Carr, 1977; Payne & Patton, 1981; Tarpley & Schroeder, 1979).

Next, the students assisted the psychologist in developing a program for their clients. Since students were new to the area of behavior modification,

their input was limited. However, most did have at least one or two useful insights and suggestions during the development of the programs. A description and an example of these programs is presented in the following section.

The Behavior Modification Projects

Each student's program consisted of first, an observation phase, and then, a test phase. During the former, students observed their clients without intervention, and collected baseline data on the frequency with which the problem behavior occurred. In the test phase, an experimental treatment was carried out, accompanied by the recording of the targeted behavior. In two of the eight programs, a second experimental treatment was presented after a prearranged number of sessions of the first.

The experimental treatments all consisted of some type of reinforcement schedule. Only positive reinforcers were administered (e.g., food, verbal praise, tactile reinforcement, etc.) None of the programs involved punishment, restraint, or the use of a time-out room.

Due to lack of time, reversal designs were not employed in these programs. For instance, suppose a student had first recorded baseline observations of a client, and then presented a treatment 1 and then a treatment 2. Ideally, the procedure should then be continued in reverse: treatment 2, treatment 1, and finally baseline observations again. Without the reversal design, the effect of the order in which the treatments occurred could not be ruled out in these programs. Students were instructed on this difficulty in interpreting their results.

To illustrate the projects which resulted from this course, I will briefly discuss a representative example. One student, M.P., worked on a project comparing the effectiveness of two different reinforcement schedules in reducing the frequency with which a profoundly retarded adult female, S.B., bit her hand.

The first schedule tried was differential reinforcement of other behaviors (DRO). According to this schedule, the subject was reinforced after an interval in which the hand-biting behavior did not occur. Initially the interval was 15 seconds; and it was doubled whenever the targeted behavior did not occur during five consecutive intervals, or halved when the hand-biting did occur during five consecutive intervals. Reinforcement consisted of giving the subject Jell-O (R), accompanied by verbal praise ("Good, S.B., you aren't putting your hand in your mouth.") The reinforcement schedule was carried out in four sessions, averaging about 37 minutes each and occurring on different days.

The second schedule tried was differential reinforcement of incompatible behavior (DRI). In this schedule, a specific behavior which was incompatible to hand-biting was reinforced by Jell-O (R) and praise, immediately after it occurred. The behavior chosen was putting blocks in a box. The client received a verbal prompt "Pick up the block," and manual guidance if she initiated a response. If the client did not respond within fifteen seconds, another prompt was given and a new interval was started. The interval was halved if a block was not picked up on five consecutive occasions.

Insert Figure 1 About Here

In Figure 1, the results of this project are illustrated. The percentage of intervals in which hand-biting occurred is recorded over a total of ten sessions, including the conditions of baseline observations, DRO and DRI schedules, in that order. The results were similar to those found in an earlier study (Tarpley & Schroeder, 1979) in which it was found that the DRI schedule (i.e., reinforcing a specific incompatible response) was more effective than the DRO (i.e., reinforcing any behavior but the targeted, undesirable one) in suppressing self-injurious behavior. However, in the present case, the effects of practice and the order of conditions could not be ruled out because a reversal design was not used.

Evaluation

An important outcome of this practicum course was the job-related experience it provided for the students. Three of the eight students have already requested letters of reference from the supervising psychologist, and two of those three have found part-time employment related to mentally retarded clients. Both these students were interested in long-term careers in applied psychology. Two other students reported that they planned to ask for letters of reference in the near future.

The students' own evaluations of the course were sought in two different individual interviews with the instructor: one given just after the course concluded, and one given eight months later. Most of the positive comments in these interviews were related to the course as a learning experience and as an introduction to applied psychology. All eight students concurred, in both

interviews, that the course provided effective training in behavior modification. All of the seven who completed paper requirement further agreed that the course effectively trained them in the writing of a scientific report. Six of eight students also regarded the course as a significant professional opportunity.

There was one aspect of the practicum which most of the students felt should be changed. Six of eight thought that the one semester credit which was given for this course was not enough. In addition, the one student who did not complete the course requirements told me that she probably would have if two credits had been given.

The average time which students reported that they spent weekly on the practicum was four hours, and the range was two and a half to seven hours. This time included a minimum of one two-hour session per week which each student was required to spend with his or her client, as well time spent reading relevant articles, graphing clients' behavior, and preparing the written report. Five students reported that they put in more than the required time with their clients; and four prepared a first draft of their report for review by their supervising psychologist. Though the quality of all the final reports was at least satisfactory, the students who had done a practice draft generally turned in better final reports than those who had not had their papers reviewed first.

Based on the feedback I received, I am considering upgrading the requirements of the course and offering it for two semester credits. When I offer this course again, I will require all students to spend three to four hours

a week with the clients, since some did anyway, and to submit first drafts of their reports. The practicum could also be designed for three semester credits by further increasing the time requirements and the extensiveness of the projects and of the written reports.

In adapting this type of practicum course to their own situations, different instructors will need to take into account the availability and the nature of the facilities in their communities. The practicality of such a course depends strongly upon finding an appropriate institution nearby; and upon the availability of a psychologist at that facility who currently conducts behavior modification programs with clients, genuinely needs further assistance in implementing these programs, and is prepared to spend the necessary time training and supervising students. Though I recommend reasonable caution in these matters, I believe instructors will have less difficulty in finding a suitable arrangement than they might expect. Instructors should not underestimate the potential advantage to a staff psychologist at a local facility in obtaining well-motivated and competent students to provide help which is free of charge.

It should be pointed out that there are client populations other than the mentally-handicapped for which practicum courses in behavior modification might also be appropriate. For instance, some mental health facilities may also be suitable for a practicum course such as this one, as long as potential clients are screened in advance (which would be an important step with any population). However, I would suggest that regardless of the client population, the students' projects be limited to behavior modification programs. Behavior-based therapies

generally lend themselves more easily to quantification and to objective evaluation of the results than do non-behavioral approaches.

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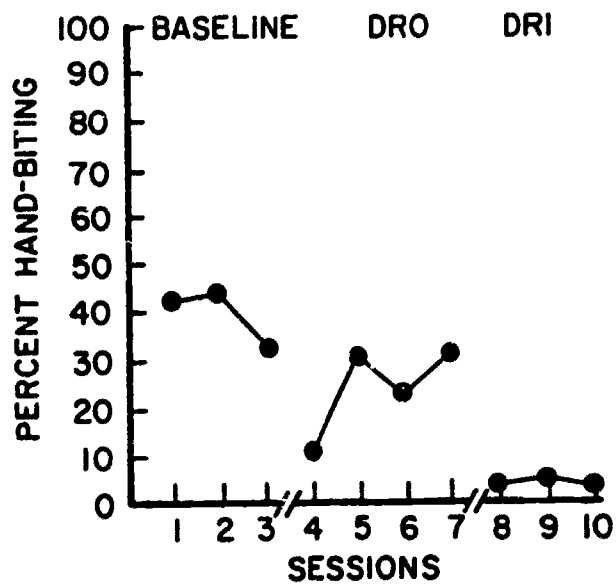
Author Notes

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Figure Caption

Figure 1. Illustration of student M.P.'s behavior modification project with a profoundly retarded adult female client, S.B. The graph compares the proportion of 15-second intervals during which hand-biting occurred for baseline observations, DRO, and DRI, over ten sessions of about 37 minutes each.



THE PSYCHOLOGY PRACTICUM: AN ADMINISTRATIVE MODEL

by

Debra K. Stein and Robert T. TAuber

ABSTRACT

The paper describes an administrative model developed to provide coordination, control, and consistency an undergraduate practicum course offered by the Behrend College of Penn State University. The Program Learning Agreement, or contract students complete, along with the duties of the Placement Supervisor, Academic Supervisor, and Practicum Coordinator are discussed.

THE PSYCHOLOGY PRACTICUM: AN ADMINISTRATIVE MODEL

by

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The Pennsylvania State University
The Behrend College

In an effort to provide a practica or internship program that provides a worthwhile educational and professional experience for the student, the Behrend College has developed an administrative model for the implementation of the Psychology Practicum. Although most Universities and many colleges offer practica courses in an attempt to provide students with applied experiences in Psychology, most departments find the coordination and administration of such courses very difficult. For a program to be successful one must provide for:

- a) the recruitment of quality placement sites as well as a diversity of placements;
- b) the recruitment of quality students to serve at the placements;
- c) the evaluation and monitoring of student performance in the applied setting;
- d) exercises aimed at relating knowledge learned in class to performance on the job;
- e) adequate supervision of student progress in the practicum; and
- f) criteria by which students are graded in their experience.

Although a practicum program can operate with one or two of these ingredients missing, one must ask the question, "Is the practicum accomplishing the task for which it was intended?--Is

it providing a valuable academic and practical learning experience for the student?"

The administrative model that we have developed was authored with the intention of trying to provide coordination, control, and consistency in the practicum course offered by Behrend College in an effort to ensure that the practicum experience became an enriching and valuable one for every student participant. Although listed on the books each term as an advanced level course in Psychology, criteria for selection of sites, selection of students to participate, supervisory procedures, evaluation procedures, and grading differed from faculty member to faculty member, and students many times had only a vague idea of how the experience related to information learned in traditional courses. The following model was developed to clear up these problems and to help students see the practicum as a course that they should consider seriously, and not one that they should just fall into.

The basic format of the administrative model that we are using can be seen in the accompanying diagram. Central to the organization of the practicum program are the Practicum Coordinator, the Placement Supervisor, the Academic Supervisor, and the Practicum Learning Agreement. The Practicum Coordinator has the responsibilities of a) recruiting placement sites and students for the program; b) gathering information which allows him/her to evaluate the placements and the students and provide a good match between the student and site; c) keeping on file descriptions of the available sites and the placements they

offer, as well as, student applications, administrative guidelines, and copies of each student's Practicum Learning Agreement; d) monitoring the students' performance in the placement by sending out mid-semester and final "job" evaluation forms.

The Placement Supervisor is the person at the institution or agency that has the most day to day contact with the student and who is responsible for ensuring that the student's practicum fits the description of goals and responsibilities outlined in the Practicum Learning Agreement. The placement supervisor acts as an advisor to the student about problems surfacing on the job and evaluates the student's progress in fulfilling placement responsibilities as well as in cultivating professional growth.

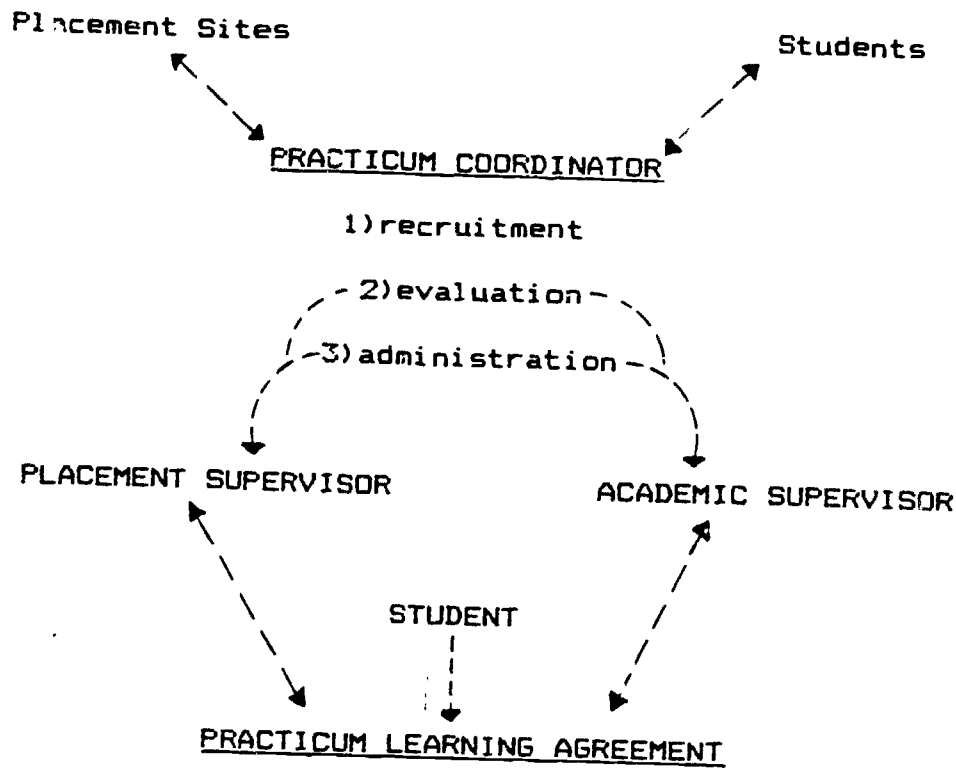
The Academic Supervisor is the faculty member who provides the student with the formal link between the college and the placement site. The academic supervisor acts as an academic counselor, offering additional exercises and information that the student may apply in his/her practicum experience. The academic supervisor may also offer objective advice about problems that arise on the job, and has the primary responsibility for evaluating the student's overall performance on the practicum and for assigning a final grade.

The Practicum Learning Agreement is a document drawn up between the student, the placement supervisor and the academic supervisor which outlines a) the specific responsibilities assigned to the student by the placement site; b) the specific exercises drafted by the academic supervisor to increase the

level of background information the student can bring to bear on the practicum experience; c) details of supervision supplied by both the academic and placement supervisors as well as details outlining how the student's performance on different tasks will be evaluated; d) how the various evaluations will be used to determine a final grade.

Although this administrative model is just beginning to be implemented, the Psychology students and faculty members have given it their rousing approval. Copies of our descriptive manual are available upon request.

THE PSYCHOLOGY PRACTICUM: AN ADMINISTRATIVE MODEL



- 1) description of placement responsibilities
- 2) description of academic exercises
- 3) evaluation procedures
- 4) details of supervision
- 5) final grade guidelines

THE STRANGE CASE OF THE DISAPPEARING STUDENT:

A Psychodynamic Approach to Understanding and Teaching the
Undergraduate Psychology Student

Marjorie Gelfond
Assoc. Professor of Psychology
County College of Morris

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one. It is a complex system
involving many different factors.

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10.5. The results of the tests are as follows:

10.6. The results of the tests are as follows:

10.7. The results of the tests are as follows:

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... ..

Journal of Management Studies, 19(1), 67-80.

1. The first group of respondents (n = 10) was composed of students who had completed the course and were currently employed in a related field. They were contacted via email and asked to participate in the study. The second group (n = 10) was composed of students who had completed the course and were currently employed in a related field. They were contacted via email and asked to participate in the study. The third group (n = 10) was composed of students who had completed the course and were currently employed in a related field. They were contacted via email and asked to participate in the study.

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• *Journal of the American Medical Association*, 1997; 277: 100-101.

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Let $\mathbf{z} = (z_1, \dots, z_n)^T$ be a vector in \mathbb{R}^n . Then

U.S. DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

1) $\frac{1}{2} \frac{d}{dt} \int_{\mathbb{R}^n} |u|^2 dx = \int_{\mathbb{R}^n} u \Delta u dx = - \int_{\mathbb{R}^n} |\nabla u|^2 dx \leq 0$

1. The first step is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

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1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Arar and Collins (1971) using a Shimadzu 101-UV spectrophotometer.

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1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

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Page 100

There is a lot of information in this report, but it is not
necessarily all relevant.

- (2) Some of the data is not very good, and the analysis is not
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- (1) The following information is not very good, and the analysis is not
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this report, but it is not necessarily all relevant.

1. The first step in the process of developing a curriculum is to identify the needs of the students and the community. This involves a thorough analysis of the current curriculum and the identification of gaps and areas for improvement. The second step is to establish a curriculum committee or task force, which will be responsible for developing and implementing the curriculum. This committee should include representatives from the school, the community, and the students.

2. The next step is to develop the curriculum framework, which will outline the overall goals and objectives of the curriculum. This framework should be based on the needs of the students and the community, and it should be aligned with the state standards. The third step is to develop the individual course syllabi, which will detail the content and activities for each course.

3. The final step is to implement the curriculum and to evaluate its effectiveness. This involves monitoring the progress of the curriculum and making adjustments as needed. Evaluation should be done at the end of each year, and it should involve the participation of the students, the teachers, and the community.

4. The final step is to evaluate the curriculum.

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1. The first step in the process is to identify the problem.

There are many factors that can contribute to the problem. It is important to identify all of the factors that are contributing to the problem.

Once the factors have been identified, the next step is to develop a plan of action. This plan should outline the steps that will be taken to solve the problem.

Once the plan has been developed, the next step is to implement the plan.

2. The second step in the process is to develop a plan of action.

3. The third step in the process is to implement the plan.

4. The fourth step in the process is to evaluate the results.

5. The fifth step in the process is to make adjustments.

6. The sixth step in the process is to document the results.

7. The seventh step in the process is to share the results.

8. The eighth step in the process is to review the process.

9. The ninth step in the process is to make improvements.

10. The tenth step in the process is to continue the process.

11. The eleventh step in the process is to evaluate the process.

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IN THE SUPREME COURT OF THE STATE OF TEXAS

FILE NO. 01-00000

IN RE: THE ESTATE OF

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under the same conditions. The results of the analysis of the data are shown in Table 1. The results show that the rate of polymerization is independent of the concentration of the initiator, but is dependent on the concentration of the monomer. The rate of polymerization is also dependent on the temperature of the reaction.

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STUDY GUIDE

Answer the questions on the back of the page. The questions are designed to help you understand the material.

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THE CLASSROOM AS THEATRE: ALTERNATIVES TO EXAMS

Lileen T. Brown, Ph.D.
Associate Professor, Psychology

Medaille College

ABSTRACT

Role playing activities were developed as alternatives to final examinations in two upper level psychology classes. In the Personality class, students portrayed various theorists and held panel discussions of case history material in a round table format.

In the Abnormal Behavior class, students filled two roles. In the first they presented case histories as clinical patients (according to self-selected categories from DSM-III). In the second they served as members of a panel which diagnosed the case and then analyzed it in terms of possible etiology and feasible treatment.

Student reaction to these activities, which were videotaped for subsequent evaluation, was generally quite positive.

THE CLASSROOM AS THEATRE: ALTERNATIVES TO EXAMS

The portrayal of characters outside one's own personal identity, the essence of theatrical performance, has an extensive and honorable history in the social sciences, as well. The playing of roles has been useful in theory development (e.g. Messinger, Sampson, and Taune, 1962); behavior modification (e.g. Janis and Mann, 1965); international relations simulations (e.g. Guetzkow, Alger, Brody, Noel, and Synder, 1963); and as an alternative to deception in experiential research (e.g. Darroch and Steiner, 1970; Zimbardo, et.al., 1973). Certainly role playing has been an integral part of classes in literature. More recently, instructors of psychology have discovered its motivational and educational utility to teach concepts as widely divergent as the history of psychology (Brooks, 1985); psychotherapy (Balch, 1983); adolescent psychology (McManus, 1986) and neurophysiology (Hamilton, 1985). This paper will describe two efforts to reap the benefits of role playing in the context of culminating evaluative activities, (in lieu of standard final exams) as well as in the initial learning process, itself.

At best, final exams pull together conceptual material throughout the semester in an integrated, meaningful, and memorable whole. At worst, they are anxiety-laden and torturous, frequently preceded by mass practice efforts to digest large quantities of rote facts often seen as unrelated and quickly forgotten. In reality, the experience for most students is probably somewhere in between. Spurred on not only by my own doubts, but by some of my own students' entreaties, as well that they did in fact know more than their undistinguished test scores often indicated and willing to accept the fact that there may indeed be a discrepancy between performance and competence in the final exam context, I decided to explore alternatives.

These exercises were developed (at Medaille College, the small liberal

arts college at which I teach) as substitutes for the final exam in two upper level psychology courses: Personality Theory and Abnormal Behavior.

PERSONALITY THEORY: MEETING OF THE MINDS

Not long ago public television channels aired the show Meeting of the Minds (hosted by Steve Allen) in which actors portrayed famous historical figures debating provocative issues in a round table format. This activity was modeled after that program. Students selected important personality theorists that they wished to portray and were instructed to become that theorist, i.e. to become so familiar with his/her ideas that they could not only present the major thrust of those ideas to the rest of the class, but could use them to analyze case history material and defend them in a panel discussion with five or six other "theorists." Case Workbook in Personality by Robert White, Margaret Riggs and Doris Gilbert was used as a source of case history material. Several panels were formed, depending on the number of students in class. Each well known theorist was represented by at least two different students (from different panels) thus enabling the "two Jungs" (or "Adlers" or "Maslows", etc.) to share their perspectives on different case studies.

The activity began one month prior to the end of the term in order to allow adequate time for thorough preparation and to avoid a "cramming" mentality. Prior to the actual presentation, members of each panel met to discuss the most effective way to present their divergent views when they "became" their theorists and attempted to establish a "meeting of the minds." The actual panel presentations were videotaped so that students could assess their own performance.

Criteria for grading consisted of:

1. knowledge of the theorist (how well did the student get inside his/her head?);
2. knowledge of the case history under analysis;
3. insightfulness with which the theorist's ideas were applied to the particular case;

4. ability to think on his/her feet in responding to questions from the instructor and the class, from the vantage point of the theorist.

Students' response to this alternate final activity was overwhelming positive. They felt challenged and more in control of their outcomes than they would have for a traditional final and claimed that they had worked at least as hard and learned more. Even shy students who were recalcitrant to participate in class discussions in their own right during the semester, lost their hesitancy to become involved under the mantle of a new identity. Similar benefits were noted with the next role playing activity that will be described.

ABNORMAL BEHAVIOR: ON BOTH SIDES OF THE CLINICAL INTERVIEW

I felt it was particularly important to get students actively involved in a course that can too easily degenerate into a cookbook mentality in which lists of symptoms that characterize particular disorders are passively accepted and memorized. Rather than have students spew back the ingredients in the recipes for schizophrenia or bipolar depression, etc. on a written final, they "become" individuals suffering from one of the conditions in DSM-III that we had studied during the semester. Each student selected one of these disorders and prepared a thorough and detailed case history of an individual that was characterized by that label. He/she then presented himself/herself as that individual to a panel of clinical interviewers (other members of the class) whose task it was to diagnose the individual (the actual label itself was excluded from the case history presentation), hypothesize about its etiology, and suggest a feasible treatment program. Thus, this exercise in its entirety required each student to play a dual role: that of a mental patient and that of a clinical interviewer. While each student was responsible for the preparation of only one case history, he/she had several opportunities to serve on clinical panels which enabled them to analyze a variety of cases. Students were graded for their performance in each of these roles thus filling the evaluative function of the more traditional

final exam. Grades were based on the validity and cogency of their presentation (case history) and on the accuracy and insightfulness of their analyses (interviewing panel). In this way, students were required to demonstrate both depth and breadth of understanding of the course material. Once again, the experience was videotaped for subsequent self-assessment.

Certainly, there are deficits to this type of approach to summary evaluation. As in any assignment, some students will take the task more seriously and approach it more conscientiously than others. Some instructors may not be willing to "sacrifice" the amount of actual class time that needs to be allotted for the adequate preparation and execution of these activities. Even successful implementation lacks the exhaustiveness of the studying required to "ace" a final exam. However, it seems to me that the benefits outweigh the problems. I believe they are useful, not only in their own right, but as prototypes for other role playing activities, and as indicators of the potential that such activities have for the active and meaningful involvement of students in their own evaluation.

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An APPLE for the Student

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An APPLE for the Student

ABSTRACT

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A technique of teaching introductory psychology, APPLE, Applying Psychological Principles to Life Experiences, is an attempt to help students recognize specific principles of behavior and assist them to transform this information into a format that is useful in daily living.

Comparison of mean final grades of two sections of introductory psychology indicated that students who were taught according to the APPLE method showed significantly higher grades than others ($N=32$, $t=2.07$, $p>.05$). Students rated the APPLE approach as stimulating, encouraging independent thought, and said they would take another course that used the same teaching technique.

An APPLE for the Student

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How to motivate students, how to increase meaningfulness of the subject matter, and how to translate what is learned to life situations are classical concerns of teaching introductory psychology. APPLE, Applying Psychological Principles to Life Experiences, is one approach to these concerns. The goal is to help students recognize specific principles of behavior and assist them to transform this information into a format that is useful in daily living.

Let us pause for a moment and clarify the word "principle". Webster's Dictionary instructs us that the concept originates from the Latin word "principium", the "beginning... the ultimate source ... a natural or original tendency...." Psychological principles, empirically derived, provide the basis for understanding the beginning of and predicting likely directions a particular behavior might take.

In the first class session a major aim is to increase students' awareness that popular beliefs are not enough for interpreting behavior. For example, beliefs that one can determine a person's character from the shape of his/her head and that blonds are more fun-loving than brunettes are unsupported by research evidence.

After a brief overview of the course curriculum, requirements are outlined and students are instructed to focus attention on the

application of psychology to everyday events. Students prepare for class discussion by reading an assigned chapter in the text, (i.e. Bootzin et al,1986; McGee et al,1984; Gleitman,1981), clarifying concepts they have learned and writing out examples from their own experiences when one or the other principle was practically useful. Because some students may be reluctant or unable to recall actual events, they are encouraged to be creative and devise situations which demonstrate how rules of behavior might be helpful with understanding self and others.

What follows is a brief discussion of selected psychological principles that have generated diverse research efforts and have applicability in a variety of fields.

Of special relevance to students are principles of memory. A case in point is the phenomenon of interference, proactive and retroactive, described as the blocking of later learned material by earlier learning and vice versa. To schedule study time so as to minimize interaction between similar subject matter is an example of practical application of interference. For research in this area see Underwood, 1957; Loftus, 1980; Wingfield, 1981.

Students learn about cognitive consistency, a tendency toward harmony (consistency) in a person's thoughts, feelings, and action regarding any one event. Studies in this area date back to Osgood and Tannenbaum, 1955; Festinger, 1957; and Heider, 1958 and others who argue that tension is experienced when cognitive consistency is disturbed and the individual is motivated to modify or alter

cognitions, emotions, and/or behaviors. Attitude change, resolutions of interpersonal conflicts, decision making are instances where the principle of cognitive consistency is applicable. Furthermore, it provides a basis for understanding why people prefer information that is consistent with what they already know and why behavior that is incompatible with stated values and attitudes needs to be justified. A striking example of an attempt to restore cognitive balance by justification of action comes to mind. After the second World War, after the holocaust, a German physician by the name of Mengeles, was asked how he, a professional sworn to relieve pain and save lives, could inflict extreme suffering and kill thousands of men, women and children in concentration camps. Mengeles replied that he would remove a cancer to save the life of an individual and what he had done was to remove a social cancer.

More than 75 years ago Thorndike (1911) explained the "Law of Effect" in terms of favorable or unfavorable consequences (reward or punishment) that follow a stimulus-response association and accordingly, either maintain or eliminate the response. Translated into practice, students become aware that they can control their own actions by the effect of self-reward or punishment. For a term paper well done and finished on time, a visit to the local movie, a favored dessert, or attending a social event function as self-reward.

Hiroto & Seligman (1975) demonstrated an important instance of the law of effect, so called "learned helplessness". When subjects

were exposed to three experimental conditions, 1)unpleasant noise that could be terminated, 2)unpleasant noise that could NOT be terminated, and 3)NO noise; those individuals who had no control over the situation transferred the experience of helplessness to new events. Abramson et al (1978) take a more complex view of this phenomenon in humans. In their opinion, the necessary prerequisite for understanding how people respond in new situations subsequent to having experienced helplessness, is to determine what they perceive as the likely cause of their original predicament. The authors observe that the more an individual attributes lack of control to recurrent, personal inadequacies, the lower his/her self-esteem and the more likely the person anticipates lack of control over future events. Interpreting these findings in terms of daily living, students realize that increased skills and knowledge are means to overcome helplessness. Perhaps, more importantly, they recognize the need to set realistic goals and consider alternative solutions to problems.

Orford in 1986 reviewed the literature on interpersonal complementarity (i.e. Sullivan, 1953; Carson, 1969; Kiesler, 1983). Essentially, this principle deals with interactive behavior between two individuals. The interesting feature is how one person responds, depends upon the behavior of the other. Particular behavior patterns repeatedly found to be complementary are friendly-dominant/friendly-submissive. This information is useful in instances of selecting a friend, choosing a mate, solving marital problems, etc.

Another behavioral principle important in interpersonal settings, is self-fulfilling prophecy which Jussim (1986) defines as "...one person's expectations about a second person lead the second person to act in ways that confirm the first person's original expectations." Rosenthal (1968) investigated self-fulfilling prophecy in the school and publicized his findings in his well known book "Pygmalion in the Classroom".

He describes how the teacher's anticipated intellectual development of her pupils, influenced the pupils to perform in line with the teacher's expectations. More recent studies by Parsons and co-workers (1982) suggest that students' self-perception, achievement motivation and teachers' projections about the students' future performance are interactive processes. In light of these results, teachers need to examine beliefs they hold about their students' abilities and the extent to which these beliefs affect teacher-student relationships. In turn, students need to evaluate how they perceive themselves and what expectations they have for themselves. Self-fulfilling prophecy has ramifications also in areas of child development and mental health. Labelling a child as "bad boy-bad girl" or prognosticating about maladaptive behavior may make the individual act in line with these expectations.

At this point, a legitimate question to ask is: At what level of conceptual difficulty should psychological principles be taught in an introductory course? Complexity of course work, it would seem, is likely to affect the learner's acquisition of knowledge.

Results of a study by Briga & Dalessio (1986) suggest that oversimplified presentation of psychological principles has a negative effect on learning and is likely to lead to faulty generalizations. The researchers cite the Yerkes-Dodson Law that "Optimal level of arousal for a task depends on task difficulty" which is presented in some text books as absolute truth. Missing is information that this principle is essentially based on studies of animal behavior and dates back to 1908 when methods of inquiry were at a different level of sophistication. Consequently, students made inferences to human behavior without scientific justification. Findings of Briga's (ibid) investigation seem pertinent to text book selection.

In drawing conclusions from this presentation, one has to keep in mind, while the APPLE method of teaching may not be particularly novel, it has been found to increase student understanding of, and involvement with course material. When mean final grades of two sections of introductory psychology were compared, the class taught with the APPLE technique scored significantly higher ($N=32$, $t=2.07$, $p>.05$). Students rated the APPLE approach as stimulating, encouraging independent thought, and said they would take another course that used the same teaching technique.

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A Rotational Team Teaching
Model for Introductory Psychology

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Running head: ROTATIONAL MODEL

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Abstract

A method of team teaching introductory psychology is described in which the instructors rotate from section to section, repeating a series of lectures within their area of expertise. Evaluations indicated that faculty and students approved the format and that the variations in order of topic coverage from section to section were not related to course grades or approval of the format. Implementation is easy, but several considerations should be made before starting up.

A Rotational Team teaching Model for Introductory Psychology

Introductory psychology at Plattsburgh State is a broad survey course in which the areas of experimental, social, personality and abnormal, and developmental psychology are given approximately equal weight. But with the great expansion of the literature in these areas, no one on our staff feels completely qualified to teach the course. As a result, we have adopted a method that is a variant of team teaching.

In our method, each instructor presents a block of material consisting of a series of 8 lectures and a 50 item multiple-choice exam to a section of the course. After this, the instructor moves on to another section and repeats the lectures and gives another exam. The exams are composed of questions from the test-item file provided by the publisher of the text. Each of the four instructors provides one-quarter of the semester's instruction to each of the four sections. We call this the "Rotating Instructor Format," RIF.

The topical units we use for the four blocks of the RIF are (1) Basic Processes, (2) Social and Methods, (3) Cognition and Development, and (4) Personality and Abnormal. For the past five semesters, we have used the 8th edition of Introduction to Psychology by Atkinson, Atkinson, and Hilgard (1983) because the coverage it provides in these four areas is suitable, and the chapters can be readily arranged in the orders needed. A biopsychologist, a developmental psychologist, a clinical psychologist, and a social-organizational psychologist with a special interest in methods form the rotating team of instructors. The order in which the blocks are presented is largely the same across the sections except that the sections begin at different points. For example, Section A gets the four teaching blocks in the order 1,2,3,4; Section B, 4,1,2,3; Section C, 3,4,1,2; and Section D, 2,3,4,1.

This approach shares the advantages and disadvantages of many other team teaching formats. Among the advantages (cf. Ware, Gardner, & Murphy, 1978), students are introduced to four members of the department instead of one, instruction is given by faculty who are up-to-date and enthusiastic about their material, faculty have an opportunity to learn teaching skills from each other, and faculty have more time to devote to other professional responsibilities. Among the special problems are maintaining a sense of structure and unity in the course, providing the familiarity between students and faculty that can be vital to development of students, and easing the difficulty many students have to changing instructors.

To help provide structure and integration in our course, two undergraduate teaching assistants (TA's) are assigned to each section. The TA's provide continuity among the blocks of instruction and a ready source of help for the students. We do several things to make the role of the TA's visible and important: they give 4 short lectures-one for each instructor, make frequent announcements, introduce the faculty, and conduct the faculty evaluations, which are done at the end of each block of lectures. They also hold weekly review sessions and office hours. In addition to the TA's there is a faculty coordinator, whose teaching load is reduced by one course. He or she coaches the TA's and coordinates all aspects of the course, including administrative details, such as, preparing midterm and final grades. The coordinator is aided by a graduate assistant.

Unlike other methods of team teaching, the RIF provides instructors with an unusual opportunity to perfect teaching techniques and lectures because instructors receive feedback on their performance four times each semester. Another advantage to teaching in the RIF is that instructors teach at a steady pace throughout the semester; they are not overloaded at some points by having

to teach their material to all the sections, one shortly after the other (cf. Ware, et al., 1978). Finally, as a result of their steady teaching throughout the semester, the instructors receive credit for teaching a whole course even though the amount of content they are responsible for is a quarter of what they would be responsible for if they were to teach a whole course in introductory psychology.

Student Evaluation

We survey the sections towards the end of the semesters to find out the student's reactions to the teaching format and to get their advice on how we might improve the course.

Table 1 shows the items used on a short course evaluation administered three-quarters of the way through the Fall semester of 1986.

Table 1
Student Responses (%) to Evaluation Items
Fall Semester, 1986

| | | | | |
|--|--------------------|--------------------|--------------------|-------------------|
| 1. "Adjusting to the new lecturers has been ____ easy for me." | | | | |
| Very Easy | Easy | Easy Half the Time | Difficult | Very Difficult |
| 19.6 | 45.5 | 29.4 | 7.2 | 0 |
| 2. "As a result of this course, my interest in taking more psychology courses has ____." | | | | |
| Increased Greatly | Increased a Little | Remained Unchanged | Decreased a Little | Decreased Greatly |
| 20.0 | 42.1 | 29.4 | 4.3 | 5.5 |

Table 1 (Continued)

3. "The rotating format was a good idea."

| Agree Strongly | Agree | No Opinion | Disagree | Disagree Strongly |
|----------------|-------|------------|----------|-------------------|
| 31.9 | 45.1 | 15.7 | 8.0 | 2.5 |

4. "Changing lecturers made the course more stimulating."

| Strongly Disagree | Disagree | No Opinion | Agree | Strongly Agree |
|-------------------|----------|------------|-------|----------------|
| 5.8 | 12.3 | 16.2 | 43.0 | 21.7 |

5. "Getting to know four members of the Psychology Department was an aspect of this course I liked."

| Very Much | Much | No Opinion | Little | Very Little |
|-----------|------|------------|--------|-------------|
| 31.9 | 34.0 | 26.4 | 6.8 | 1.3 |

6. "I would rate the contribution of the TA's to this course as:"

| Very Important | Important | No Opinion | Unimportant | Very Important |
|----------------|-----------|------------|-------------|----------------|
| 19.1 | 48.6 | 22.1 | 6.4 | 4.3 |

N=235

The responses indicate a favorable reaction to the RIF, and the problem of adjusting to new lectures does not seem to have been a severe one. As indicated by the responses to item 3, about 75% of the students indicated the RIF was a good idea. This item was included on previous evaluations as well as another evaluation administered after the last exam in the Fall 1986 semester. As shown by the frequencies in Table 2, there is a high degree of reliability across the semesters.

Table 2
Reliability of Responses to
"The Rotating Format Was A Good Idea."

Response (%) by semester to "The rotating format was a good idea."

| Semester | Agree | | | Disagree | |
|---------------------|----------|-------|------------|----------|----------|
| | Strongly | Agree | No Opinion | Disagree | Strongly |
| Fall, '85 (N=361) | 38.2 | 35.1 | 9.1 | 10.2 | 7.2 |
| Spring, '86 (N=114) | 37.7 | 44.7 | 6.1 | 7.9 | 3.5 |
| Fall, '86a (N=235) | 31.9 | 45.1 | 15.7 | 6.0 | 2.5 |
| Fall, '86b (N=410) | 37.3 | 38.5 | 13.2 | 7.1 | 3.9 |

The responses to this item on the final evaluation of 1986 were compared across sections to determine whether there was a relation between topic order and approval of the RIP. Chi-square analysis failed to find a significant ($p < .05$) relationship. Accordingly, it appears that approval of the format is not related to topic order, at least to the extent that it was manipulated here.

Similarly, a chi-square analysis of the final grade distribution by section also turned out non-significant, which suggests that topic order did not affect achievement either. This is consistent with the results of Laffitte (1986), who also did not find a significant effect of topic order on achievement in an introductory psychology course. Laffitte evaluated a topic order that Lenthall and Andrews (1983) suggested would be better than the order followed in most introductory psychology texts. Finally, an analysis of final exam scores carried out at the end of the Spring semester of 1985 the last

time students were required to take the final exam, indicated there was no significant difference among the 4 sections of the course.¹

Write-in comments on evaluations often indicated students liked the RIF because the change of instructors was stimulating. Those who did not approve of the RIF often wrote-in that they had a difficult time adjusting to changing instructors.

In regard to other aspects of the course, evaluation data and personal observations indicate the TA's, for the most part, have worked well with the students and that they, as hoped, provided a strong sense of continuity and stability to the course. Students in the course turn toward the TA's readily for help and to complain. The course would not work without them.

The TA's derive a great deal from the course, too. They get practice in leadership, public speaking, and helping skills; they also get a thorough review of psychology, which is a big help for those taking the advanced GRE in psychology. Although the work is challenging and time consuming, many more apply each semester than we can take.

The possibility of rapid faculty "burn-out," which seemed very likely at first, never materialized. In fact, three of the original four instructors on the team taught for six consecutive semesters. Instead of the repetition of the lectures becoming boring, it has become enriching as each instructor endlessly tinkers with his or her material in an effort to improve the presentations.

¹Since then we have followed the suggestion of Kottke (1985) which makes the final exam an optional make-up exam. The score on the final, properly weighted, replaces the score on any one previous exam that is lower. The final exam also serves as a make-up exam for any exam that was missed altogether.

Many problems have been eliminated, but some difficult ones remain. Among these are easing adjustment to new instructors and promoting contact between individual students and instructors. Flanagan and Ralston (1983) solved these problems by having the two instructors involved in team teaching present and actively interacting at every class meeting. This solution can not be applied here because the instructors are always teaching their material to different sections of the course.

Another problem is the small degree of active involvement with the course material that many students show. Considering this is more an outcome of the large section sizes than the format, optional, small, extra-credit discussion sessions have been held in the late afternoons by the instructors. This has been done so far only in the Spring semesters, where the smaller enrollment allows the extra sessions to be scheduled without burdening the instructors. These have worked to promote extra involvement, and they have become very popular among the students.

Recommendations

To those interested in trying this approach, we suggest consideration of the following.

1. Thoughtful selection of the team of instructors. To succeed the instructors need to work together closely and to adhere strictly to prearranged schedules and policies. Probably the expertise of the instructors is less important than their enthusiasm for the approach.
2. Careful consideration of the text. An easily divisible text is necessary, and consideration should be given to the use of a study guide that can provide additional support for the structure of the course.
3. Selection of active, involved TA's. Both faculty and student feedback shows that student TA's are a vital part of the course. The most effective

T.'s have had a strong sense of commitment to the course and enthusiastically urged their students to work hard. It is necessary to supervise the TA's carefully (cf. Mendenhall & Burr, 1983).

4. Agree at the outset to try the approach for at least a year, preferably two. Otherwise the students may see the course as an experiment in which they are nonconsenting subjects and become resentful. Further, the faculty team will need time to learn what works for them. Everything went much smoother after we had been at it for two semesters; faculty knew the schedules, what each other covered, and what they could reasonably expect the students to know for the exams. Students came along to the course expecting the fast pace, changing instructors, and standardization of test and grading policies over all the blocks of the course.

But do the students learn as much in the RIF as in the traditional single-instructor section? We have not been able yet to arrange a completely valid comparison; however, from some informal comparisons with other, single-instructor sections, our preliminary conclusion is that students in the RIF learn at least as much as students in the traditional format. Judging from the lectures, readings, and workbook assignments and the fact that the students generally average 75% correct on the exams, the students appear to be learning a good deal in the RIF.

Conclusion

The RIF works well from the point of view of the instructors and the majority of the students. Course enrollments have held steady, and the department has decided to continue using it for the near future. It would be nice if no students had difficulty with the frequent instructor changes. But, on the other hand, the changing faculty may be a salutary step towards intellectual independence and maturity.

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Infusing Black Psychology into the Introductory Psychology Course

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A review of ten of the currently used Introduction to Psychology textbooks reveals that these sources do not acknowledge the existence of the large body of literature addressing Black and Afrocentric Psychology as a field of inquiry. In addition, issues related to race, racism and discrimination, culture and social class are dealt with briefly (one page or less), if at all. This omission is significant, given the many contributions of Black psychologists in the form of both theoretical and empirical literature, (Jones, 1972, 1977, Boykin, et al, 1979, White, 1984, Akbar, 1981) the development of extensive curriculum materials (some of which are presented in the Association of Black Psychologists' (ABPsi) Sourcebook for the Teaching of Black Psychology (Jones, 1978) and presentations at conference (especially the ABPsi National convention.) These psychologists provide alternative theories for understanding the psychology of Black people.

I suspect that teachers of college level psychology courses may not be aware of the areas of Black and Afrocentric psychology, and/or they may not be aware of resources needed to develop lectures on these topics. This paper will provide a history of the development of curriculum materials on Black Psychology, focusing specifically on the introduction to psychology course. The impact of lectures on these topics will be discussed, along with techniques for managing the various reactions students have to this topic.

Benjamin et. al (1985), note in the introduction to their text on introductory psychology that an estimated 1.5 million students enroll in this course annually. If approximately 5-7% of these students are

Black, (at Old Westbury, the introductory sections have an enrollment of 30-50% Black students) it is clear that this is an essential course in relation to reaching Black students and identifying those with talent. A possible negative outcome of not presenting Black Psychology in the first course is a loss of interest in the field by some Black students who might otherwise have continued and considered pursuing graduate training. Given the decreasing numbers of Black applicants to some psychology programs and the shrinking resources available to those who do persist in the field, this is an area with which we must be concerned.

Therefore, it is incumbent on psychology faculty to fill the gaps in textbook materials by presenting lectures and resources on racial issues in the field of psychology, including an introduction to Black and Afro-centric Psychology perspectives. To neglect to present this information could give students the impression that Black psychologists do not exist and/or have not contributed to the field. For students who often exhibit low self-esteem and negative self-concept, this can be detrimental. This is particularly true in departments which do not include Black faculty members. Black students must be provided with a more positive framework within which the ideas presented in their textbook (notably those involving learning, intelligence, family dynamics and psychopathology) can be analyzed and interpreted.

A review of the literature revealed two articles on teaching Black Psychology (Hicks and Ridley, 1979, Fairchild, 1984), and one on teaching Black sociology (Hill-Collins, 1986). Since 1979, the American Psychological Association journal Teaching of Psychology has not published articles on this subject. This is yet another indication that

psychology curriculum has ignored the importance of issues related to people of color. Students could interpret the lack of material on people of color as an indication that these issues are irrelevant, or that Black and other people of color have not been studied by psychologists. Both interpretations are inaccurate and serve to limit student's knowledge about themselves and the field of psychology.

It is important for students to know at the outset that Black Psychology is a well developed field with a long history. Jackson (1982) dates Black Psychology to the 1920s when Black researchers began to challenge some of the racist notions being promoted by white researchers. Guthrie (1976) also provides an excellent review of some of the early contributions of Black psychologists, as does White (1984). Students should be aware that well before the Civil Rights movement, Black scholars were investigating issues related to the psychology of Black people. The development of the area of Afrocentric approaches should also be outlined.

There are a number of fundamental points which must be covered in a lecture on Black psychology. I divide my Black Psychology lecture into three major sections, background, definition and application.

Background:

- 1) A brief history of Blacks in the United States. Students should be exposed to the fact that Black history does not begin in this country. They should know what part of Africa we originate in, and they should be introduced to some of the notions related to the psychology of Black people. One excellent example provided by Thomas and Sillen is that of "running away madness". Notions of

our sexuality, family dynamics and educability can also be pre-
here, briefly.

- 2) The development of the cultural deficit model should be discussed. Dillard's (1972) Black English and the many texts on Black families can be useful in this regard. The continuing role of Black psychologists in dispelling these beliefs can be illuminated here.
- 3) The basic notion that many early psychologists harbored racist beliefs about Black people must be communicated. G. Stanley Hall's 1905 article can be useful here. Students should know that some psychological theories have been utilized as a means of oppression.

Definition:

- 1) Here, I provide a definition of Black Psychology and of Afrocentric Psychology, emphasizing a) these approaches seek to develop theories based on African rather than European philosophy, b) that these approaches include spirituality, as an important aspect of psychology and c) the names of key figures in Black and Afrocentric Psychology.
- 2) The focus on positive aspects of our psychological development should be noted as a hallmark of the Black psychological perspective. As Nobles (1972) has noted, Black psychology is not "the darker side of psychology." We are concerned about the uniqueness of the experience of Black people, and its connection with African heritage. The idea that there is a group of researchers interested in viewing Black people from a positive point of view,

emphasizing our strengths, adaptability, achievements and cultural heritage should be made clear.

Application:

- 1) At this point, I apply Black Psychology to a particular area of investigation . The Black Family is an excellent area to use, with the work of Nobles (1974), Billingsley (1968), Pipes-McAdoo, (1981), and Blassingame (1977) providing data.
- 2) Students can be introduced to the idea that although Black people are in the "minority" in this country, we, along with other people of color are in the majority in the world. Work which emphasizes the cultural continuity between Africa and the diaspora can be highlighted.

The introductory psychology course presents certain limitations with regard to covering a wide range of topics. Time restrictions are great. Instructors might choose to eliminate certain topics in order to present one or more lectures on Black psychology.

The introduction to Black Psychology must include an introduction to the Association of Black Psychologists. The History, By Laws and Ethical Principles published by the National office can be useful for this purpose. Details about the local chapter's development can be included. This will expose students to the fact that there has been a history of Black psychologists in this country and that there are potential role models for those students interested in pursuing psychology as a profession. Copies of the newsletter can be made available during class, as well as convention programs and newsletters from chapters across the country. It is also a good time to publicize the Resource Manual for Black Psychology

Students (Johnson, et al, 1987). Membership forms can be distributed, and students should be encouraged to share the information with other Black psychology students.

Often, a segment on careers is omitted from the introductory psychology course, or the discussion is very brief. The Black Psychology lectures could include career profiles of several noteworthy Black psychologists. The political involvement of members of ABPsi around the country is also important. The role of Black psychologists as social activists should be emphasized whenever possible.

Needless to say, a diverse range of reactions will be encountered from students during and after lectures of this type. Both positive and negative reactions have been obtained from Black and White students. One Black psychology major left the class as I was introducing the topic. Positive reactions consisted of a Jamaican student speaking to me after class for the first time after the Black psychology lecture. He complemented me on the "truth" of my statements, and asked about obtaining a copy of the tape by Na'im Akbar I had used during class. Later, he expressed concern that I might have trouble achieving my tenure due to the reaction of some students. During other lectures this student appeared to be only mildly interested.

In my second semester, the date of the lecture was clearly written on the syllabus. It followed two other lectures relevant to people of color; one on machismo in Puerto Rican culture and one on intelligence testing. In the latter lecture, one student, who tended to make hostile comments during class, argued vociferously that school failure should be blamed on parents, not on IQ testing. On the day of the Black Psychology lecture, 16

of 43 students were absent from class, when the average number of students absent during the rest of the semester was 9. It is interesting that 50% of the students absent were Black. During the lecture one White student walked out. The previous semester, while presenting this lecture to another faculty member's section, a student left the room while my back was turned setting up the audiotape. She told her professor "She was making me listen to things I wasn't ready to hear." Fortunately, this student was exposed to most of my lecture before she reached "stimulus overload."

Due to these various reactions from students, scheduling the lecture during the semester can present certain dilemmas. It is important, in an introductory section where the background of the students can be quite diverse, to present the Black Psychology lecture after rapport has been established with the class. Even then, students might strike out at the instructor in the form of negative comments on the student evaluation. Each semester, several students have made the statement that I a) am racist, b) cater to Black students, c) "hate White people" and other similar comments. I am concerned about these comments because it is possible that other white students will avoid my courses due to the incorrect assesment of my racial attitudes made by one or two students. I believe these comments reveal the difficulty many white students experience when presented for the first time (or the tenth time) with ideas which are different from their own, particularly when these ideas involve racial pride coming from a Black woman. Many students on our campus have their first exprience with a Black teacher in college.

Teaching Black Psychology offers an excellent opportunity to

interweave other disciplines into the field of psychology. Unfortunately, most black and white students enrolled in introductory psychology courses at Old Westbury are no longer being exposed to Afro-American history courses and general history courses continue to ignore racial issues, racism, and the accomplishments of Black people. In my classes, very few people even know what part of Africa Black Americans originated from. Sociology and Anthropology can be useful. Students can be encouraged to pursue these area in future coursework. The contributions of scholars in these fields can be briefly mentioned.

It is clear that one or two lectures in one course cannot correct a lifetime of negative educational experiences with regard to the history and psychology of Black people. However, by infusing Black psychological concepts into the Black psychology course, students will gain some exposure to experiences and ideas they might otherwise have missed. All students can benefit from gaining an understanding of people different from themselves.

Future research on curriculum development in Black psychology should focus on the impact of Black psychology courses on Black and other students. How much do these courses alter students' perceptions of Black people, poverty, and racism? Evaluative procedures could be utilized to measure attitude change, gains in knowledge and changes in self-esteem. Many students could benefit from courses which focus on the strengths, adaptiveness, coping strategies and cultural heritage of Black people. We must challenge all of our students to understand the conditions and characteristics of Black people from a more culturally relevant

perspective, even if this is painful for them at first. It is also important to publish additional work on curriculum development in the field of Black psychology in order to maximize faculty exposure to this area of investigation.

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On Motivating the Unmotivated Student

by

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Initially when I first started teaching I aimed for a perfect semester of four classes of 100% eagerness, enthusiasm, happiness and cheer among my students. Now I settle for a winning record of more smiles than frowns. Initially I thought it was the charisma of the professor, a natural talent that could not be explained by tight structured lessons or advanced degrees which meant that the person was smart. Next, I thought it was some kind of teaching device, some method that would suddenly electrify a lesson or a unit. So, I read all my journals, tried humor, tried special large group/small group strategies, used special films. Now I still believe that charisma and special devices work but I feel that motivating students requires a total program that goes beyond charisma and teaching methodology.

Course Objectives

The first question a professor must ask himself/herself is, "What do I want students to learn?" I want them to have exposure to a liberal education via student/faculty contacts involving discussions of intellectual and course related matters. I want them to socialize formally and informally. I want them to develop career knowledge and skills. I want them to improve interpersonal skills and peer interactions. And, perhaps most importantly, I want them to foster the development of the components of creativity.

The next question then becomes, "What are some of the components of creativity?" Some of the components of creativity are:

- a **fluency** which is the number of ideas a person develops in response to any problem

b. flexibility which is the number of different kinds of ideas a person thinks of when they are faced with a problem

c. originality which is the uncommon or rare idea.

What are creative people like?

They have a strong sense of humor. They see incongruities in situations that are not obvious to other people. Creative people have a high capacity for self amusement and are not as bored as other people. Creative people are determined. They are very determined to finish projects they start. Creative people are able to tolerate ambiguity. They are able to function as well at some tasks in the absense of structure as in its presence. Creative people can create their own structure. Creative people have a rich fantasy life. They have rich imaginations. Creative people typically have unusual problem solving strategies. They are fluent, flexible, and original in their thinking about problems.

Using these basic assumptions here then are some rules for motivating students:

1. Get inspiration for new ideas in any way that you can, especially from sharing ideas freely with Professors within your college or university
2. Never stick with a losing game plan. Be flexible.
3. Reward whatever assists student progress; discourage whatever does not
4. Don't be trapped by rules for motivation; keep them flexible.
5. Keep the disciplin firm. Give penalties for absences or lateness or for missing assignments. Good discipline gives you the opportunity to motivate your students and then to teach them.
6. Change your approach often even if things appear to be going well.

7. On a personal level, be the kind of person the students want to please. This is not to say that you need to win a popularity contest but be consistently fair, friendly, and firm with a sense of humor and a warm, encouraging attitude.

8. Give students specific performance tasks. When people know they have a definite task to perform, they are more likely to be motivated to obtain the necessary skills to do the job.

9. Students rate courses as number one in terms of learning when they get individual attention, when they create a product, and when there is a combination of hard work and fun.

From this we can say that there are 6 essential factors involved in motivating young people: hard work, fun, good process, discovery, product creation, and variety.

10. Be prepared to teach. If you care about the subject, it shows.

11. Smile and move around. Display animation in voice and manner. Be enthusiastic.

12. Call students by their names. But, try to learn more about them than just their names.

13. Use sincere praise statements, oral and written again and again. Doing this is good for the student and it forces you to think about the individual student.

14. Reveal some of yourself. Relate anecdotes about your family and your failures to course materials. Students can't like someone they do not know.

15. Let students give you assignments. Then carry them out. Read a suggested book, see a recommended movie, listen to an album, etc. Learning is reciprocal.

16. Take time to ease off. Share a joke- - let some time be spent on a common class problem. Listen to needs as well as words. Be honest! Be fair! Enjoy yourself!

17. Set the stage with a semi-playful atmosphere.

18. Establish a safe, supportive space so that students feel comfortable role playing and asking questions. The atmosphere should be nonjudgemental and nonthreatening.

19. Teach students to be more creative:

a. Strange, unusual and odd questions from students should not be discounted. If students see that they cannot ask their good questions, they won't ask them. Of course sometimes these questions are irrelevant, designed to get the professor off guard but in general once students see that can really ask you what they want to know and not worry about your reaction, creative behavior tends to generalize to other areas.

b. Try to find something positive in all ideas. The best approach is to follow up bad questions with some of your own that require the student to think through the problem. When students evaluate their own thinking they are far less likely to inhibit future questioning.

c. Make it a point to systematically reward creativity in your students.

d. Expect and demand creativity from your students. In situations where you tell students you expect them to be creative and where creativity is a part of the overall performance grade, you will find more creative behaviors. You will have to define creativity for your students so they know what you mean.

e. In terms of grading, creativity should be extra. Creativity should be rewarded but in terms of extra credit.

f. Model creative behaviors. Students who are exposed to a creative model act more creatively than do students who are exposed to models who are not.

g. Reaching one's full potential for creativity appears to be a matter of living and working in an environment that recognizes and rewards a variety of creative behaviors.

Some examples are:

1. Behavioral Contracts for Change:

These can take the form of self help projects. Create a contract with a student to change a behavior. The goal must be overt and specific. Teach the student how to draw up a contract, sign it, and discuss commitment. Some behaviors that students have successfully been able to change are: dieting, stop smoking, stop drinking, stop biting fingernails, stop using foul language. The self-help projects are related to course material in terms of theory and therapy.

2. Stress Reduction. Students are taught the theoretical background of stress reduction and then they are taught relaxation techniques using both physical and visual imagery. Finally there is a final assessment of their project. Once again, the relaxation techniques are related to course content.

3. Human Sexuality. In the Human Sexualities classes experiential exercises are utilized in order to demonstrate certain psychological principles. For example, two students are chosen. One student is told to close his or her hand. They are told that they have something very important in their hand. Something that the second student needs to go on with their life. The second student has to convince the one with the closed hand to give him or her what they have. Afterward there is a discussion of tactics. What tactics did they use? Are female tactics different than male tactics? As time went on, did

the tactics become more drastic. In this manner male and female tactics are related to Human Sexuality.

4. Human Sexuality.

Class projects can take the form of: 3 narrators, a couple, and a therapist. The narrators give the historical background of the couple, the academic description of the problem and a description of the type of therapy. This procedure involves actual role play which is planned from the beginning of the semester. In this manner, students become involved in the research and the role play.

5. Developmental Psychology. In this class students play The marriage game. They pair off into couples and basically go through life encountering unexpected surprises and crises. A discussion of conflict resolution and the responsibilities of marriage ensues. In this class also, students are required to carry around a raw egg for two weeks. During this time the egg represents their newborn baby. The egg must come to class with them at all times and if they decide to go out without the egg, they must find a baby (or egg) sitter. After the two weeks are up, students must hand in a reaction paper and a class discussion ensues. It is always amazing to me to see how at the onset of this exercise students will express annoyance. During the project, however, they build cribs, carrying cases, make clothes, give the egg a name, and become devastated if anything happens to the egg. One student reported that her egg was egg-napped. Once again through experiential learning students can ponder the responsibilities of having a baby. In order to demonstrate what it feels like to be an old person, students are required to put rubber bands on their fingers holding them together and/or to place socks on their hands in order to see how a person is slowed down by age.

6. Introductory Psychology. The blind trust walk is a good exercise for Introductory Psychology students. In this exercise, one student is blindfolded. Another student then leads the blindfolded one around the school. There is no talking, just leading. Coming back the student is led through the halls only through talking not touching. Later there is a discussion of trust. Under which condition did they feel more comfortable.

7. Sociology. In sociology classes in order to demonstrate norm violating behavior, have students get on an elevator facing backwards. Have them attempt to purchase an item offering to pay more than the actual cost. Then in class, discuss their own and other people's reactions when the norms are violated.

8. Scientific Method of investigation. In order to demonstrate theory, generating hypotheses, and data collection, have students do something like the effect of caffeine on test scores. For example randomly assign students to groups (use first letter of the last name to assign. A-M has coffee; N-Z doesn't). One group has 1 cup of coffee before the test, the other group doesn't. The test scores are the dependent variable. Relate the entire study to the scientific method of investigation, examining predictions etc.

altruism studies: falling on campus, video taped.

9. Sex Roles. Sex role stereotypes can be examined by having students fill out sentence completion forms and then discussing their answers in terms of stereotypes. Some examples are

Nice girls are_____

Nice guys are_____

Responsible men are_____

The little boy in me is_____

The little girl in me is_____

To examine Sex Role Expectations, have students complete the following sentences:

a. Since I am a woman (man):

I am required to

I am allowed to

I am forbidden to

b. If I were a woman (man):

I could

I would

I would not

c. The "human" in me wants to

d. The most important thing in life for a man is_____

e. The most important thing in life for a woman is_____

To study multigenerational transmission patterns have students examine their parents' commandments. For example,

List 10 commandments your mother or grandmother gave you about being a boy or a girl.

List 10 commandments your father or grandfather gave you about being a boy or a girl.

Teaching The History Of Psychology By A Major Questions Approach

Mark C. Gridley

Abstract

This approach to teaching the history of psychology elicits students' attention and motivation by asking them to consider how they themselves became the way they are and to resolve the major questions of psychology in a personal way before comparing their answers with the history of answers that were offered by the great philosophers and psychologists. Questions that are easily treated in this way include the nature-nurture debate, the pleasure seeking-pain avoidance motive, the affiliative need, the curiosity motive-exploratory drive, and the idea that a relationship is the smallest meaningful unit of analysis in human perception. Given adequate bibliographies, students are required to arrive in class ready to offer not only their own personal feelings, but also the opinions of philosophers and the findings of contemporary psychologists. By formulating the coverage of psychology history in terms of questions that can be answered with satisfactory research support, the teacher coaches students through the philosophizing and blind alleys of past thinkers and increases their familiarity with landmark historical tests of the ideas.

Teaching History of Psychology by a Major Questions Approach

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Students usually consider courses in the history of psychology to be dry, abstract, and dull. They perceive the historical figures as lofty and ancient, the research as being for research's sake, and the academic questions not being down-to-earth or relevant to the real life of the student. The well-motivated professor need not perpetuate those perceptions. Alternative approaches, including those listed by Alvin Smith (1982), have been offered. Issues of Teaching of Psychology have contained suggestions for engaging the active interest of students by requiring students to organize a mock APA convention (Cole, 1983), to dig out their own institution's record of achievement in the history of psychology (Davis, Janzen & Davis, 1982), and to perform classroom experiments replicating historic demonstrations (Caudle, 1979; see the February, 1979 issue for more). But despite the success of these strategies in selected situations, they do not solve all the problems of tapping student interest in all situations. This paper offers another alternative for another situation. This is an approach that should work for relatively small classes of students who are capable of independent thinking and blessed with an instructor who is not afraid to use the course as an opportunity to catch up with current research, and integrate it with fundamental streams of philosophical thought that underly psychological inquiry.

The proposed approach grabs the students' attention by asking them to consider how they themselves became the way they are. It makes them reflect, in the same ways as the philosophers who generated the major theories in the first place. This approach captures student interest by asking, for example, how THEY THEMSELVES became the way they are: "Were you BORN this way or did you LEARN to act this way?" leads to a consideration of the nature-nurture debate. The validity of hedonism can be examined by asking, "Is most of your behavior motivated ultimately just to reduce sexual tension and hunger pangs?" The overriding tactic in this approach is to do as E.L. Thorndike suggested: leave students on the verge of total perplexity so that the desire to resolve the questions will spur them on to reflect in order to satisfy their own curiosity.

The strategy for enlivening such courses is to sidestep the routine, year-by-year chronology and collaborate with the students on extracting an historically organized view for each of a limited number of separate questions. The major figures and ideas in the history of psychology can be covered by considering as few as three major issues. My own students were intrigued by the answers offered by philosophers and psychologists, running back to the ancient Greeks and concluding with current laboratory findings. Questions amenable to this approach include the nature-nurture debate, the pleasure seeking-pain avoidance trend in human nature, the affiliative need the curiosity motive/exploratory drive, and the idea that a relationship is the smallest meaningful unit of analysis in human perception.

To keep students involved, it is helpful to pose the questions in advance and then make available sufficient literature. Comprehensive basic texts such as those of Sahakian (1975), Leahy (1980), and Chaplin and Krawiec (1979) are good for this approach, as are bound volumes of Scientific American perception and psychology articles (Held & Richards, 1972). Students need be required to arrive in class ready to offer not only their own personal feelings, but also the opinions of philosophers, the findings of physiologists and current researchers. Do not tell the students what pages to read. Just tell them the names of the thinkers, and ask the students to piece together the relevant ideas and research findings of these people, by using the textbook indices. Make students responsible for digging out and familiarizing themselves with all the key information before class begins. Conduct class meetings by using a round table format, and have students first tell how they themselves would answer the questions. Then have them compare and contrast their intuitions with the historic philosophers' and psychologists' positions and research findings. This makes students think about the issues from both a personal/practical perspective AND from the perspective of history. They discover that others have also wondered about these same questions. Some came up with good answers, while others espoused answers which current laboratory findings refute.

You must frequently reiterate the question at hand. For example, to deal with the pleasure seeking/pain avoidance motive in human nature, you first might ask students to spend a few days deciding what motivates their own behavior. Keeping daily diaries facilitates this assignment. Only after fresh and personal reflection on the part of the students, should you expect them to appreciate the answers that were offered by Aristotle, Hobbes, Bentham, Thorndike, Hull, Berlyne and Zuckerman. After students bring to class the thinking of the great scholars and pit it against their own feelings about the issues, you can add historical background and pursue as little or as much detail as class time and student interest permit. To keep the students involved, you might ask students whether they think that pleasure seeking is the MAIN human motive, the PROPER motive, or the main motive only for SOME individuals. It is also essential to ask students to explain why they take the particular stand they do. You and your students will find that the implications are neurological, ethical, and political, not just psychological. It is provocative to ponder what motivates people! Robert White's review article (1959) provides a very readable summary of drive reduction and alternatives to drive reduction motives. Another reference that undergraduates find readable and relevant is a group of readings collected by David McClelland (1955). The latter provide an effective foil to the animal studies that students frequently find difficult to generalize to human behavior.

To deal with the nature-nurture debate, you might first ask students to ponder why they have the personality and abilities they have, and why they like the food and music they choose. After fresh, personal reflection, your students will be ready to become familiar with what the great thinkers said about our being "pre-wired" with wisdom as opposed to our beginning from a "tabula rasa." Ask students to be able to explain the stances of Plato, Aristotle, Kant, Descartes, Pavlov, Watson, Skinner, and Piaget. (You might take this occasion to present an entire sequence on debates between the gestaltists and behaviorists.) A good conclusion to their sequence would involve reading recent laboratory findings about infant depth perception, imitation skills, and food preferences. Some of these findings are described within their historical context, in very readable form, with excellent color photos, in articles by T.G.R. Bower (1966) and Otto Friedrich (1983).

By formulating the coverage of psychology history in terms of questions that CAN be answered and which currently DO have satisfactory research support, you coach students through the philosophizing and blind alleys of "common sense", and you ease them into becoming familiar with landmark historical "tests" of the ideas. The students leave the course feeling they really DO know more about how they themselves tick. They have conducted intellectual exercises analogous to those performed by the great thinkers of the past, and, along the way, they have learned some of the history of psychology!

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Behavioral Statistics: A slightly different approach.

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ABSTRACT

Psychology majors generally learn little from their undergraduate course in statistics. In an attempt to change this situation, we stress learning geometric and English translations of each algebraic formula. Only formulae which allow for easy translation are used. This allows for an intuitive understanding of statistical materials by undergraduate students. Additionally, we teach rules first, then exceptions only as necessary. With these and other minor changes, preliminary findings indicate that we have markedly improved performance in the course.

The science of psychology is, like other sciences, a quantitative discipline. Undergraduates majors must therefore take at least one course in mathematical methods in psychology in almost all psychology programs. Since many students interested in psychology do not have either strong backgrounds nor interests in mathematical techniques, this requirement is often a stumbling block of major proportions.

From the point of view of psychology faculties, the problem is no less severe. We are aware, as beginning students are not, of the importance of statistical methods in psychology. However, we have learned the difficulties involved in imparting them to students. As a result, staffing the introductory statistics course is often a problem. Senior faculty may, as a service like a difficult committee assignment, "take on" the statistics course for a year or three. Alternatively, we sometimes hire new, quantitatively oriented, assistant professors to deal with the problem. Both these solutions work temporarily, at best, and only solve the problem of who is to teach statistics, not of how to teach it. A third solution is to have students take the statistics course in the statistics or computer sciences department. The logic here is that statistics departments should be able to teach statistics even if we can't. This solution usually has the effect of shifting the blame for students difficulties, not of solving the problem.

There are a number of costs associated with these problems. In the first place, many students avoid the psychology major because of the statistics requirement. Second, the large majority of psychology majors cope with the statistics course instead of learning from it. In a prime example of the five minute college education, students memorize the relevant formulae and hope to guess correctly about which problems to apply them to. They "get through" statistics without really understanding any of the underlying

principles. Their primary learning experience is that they can not learn these materials.

At Rutgers, we have seen these results among both our own undergraduates and among the products of other undergraduate programs, our entering graduate students. In our own undergraduate introductory statistics course, we have traditionally had a high dropout rate. Further, instructors have usually been disappointed with what the remaining students learned. Finally, the retention of statistical abilities after the introductory course has been generally unsatisfactory.

The extent of similar problems in other undergraduate departments can be seen among our entering graduate students. We are most familiar with the abilities of our clinical psychology graduate students. Rutgers has a highly selective, research oriented, Ph.D. program in clinical psychology. The faculty interview 25 students or so from an applicant pool of 300 or more for 7 slots each year. The students we interview almost always have mathematical aptitude GRE scores of 600 or higher. They all have superb letters of recommendation and excellent undergraduate grades. They have almost all been deeply involved with research as undergraduates. Yet when they are interviewed only about 50% of this elite group can coherently discuss an interaction in the analysis of variance. Note that these applicants can explain other, more complex (but nonmathematical) material quite well during these interviews.

This situation has prompted a reconsideration of teaching methods in the introductory statistics course. We have not been alone in this. The teaching of mathematical skills on the introductory level in colleges has been the subject of much recent discussion. For example, undergraduate mathematics departments have been recently concerned with the problems in teaching basic calculus.

Two basic factors have emerged as central to a conceptual reorientation of the course. First, we have made the course far more geometrically than algebraically oriented. Second, we now treat the course as a skills oriented enterprise rather than as an ordinary academic course. Both these changes have several practical ramifications in the way the course is organized and taught.

The first change, the orientation to a geometric as opposed to an algebraic orientation, is probably the more important one. Statistics is taught by people who are good at algebra. An ability to to translate algebraic notation into both English and a mental picture is almost universal among colleagues teaching statistics. It is, however, not common to the majority of Rutgers psychology students. As a result, statistical formulae make intuitive sense to statistics teachers but not to most statistics students. On the other hand, students can translate pictures into English, even when the pictures are of geometric figures. Presented geometrically, concepts such as squared distance from a mean or from a regression line are easy to "see" and make intuitive sense. But the problem cannot be resolved simply by showing pictures of functions. Students must be able to use and manipulate algebraic formulae. How can this be done? We think that the way to do it is to present only algebraic formulae which are a direct translation of verbal and geometric representations. This means avoiding essentially all computational formulae and using only definitional equations.

For example, the definitional formula for the sum of squared deviations around the mean of a sample is $\sum (\bar{X} - X)^2$. Students can see that this formula is a direct translation of the notion of distance from the mean. They can translate $\sum (\bar{X} - X)^2$ into the sum (\sum) of the distance of each value from the mean ($\bar{X} - X$) squared (2). The computational formula is, of course, $\sum X^2 - (\sum X)^2/N$. The computational formula

doesn't allow students to make a one to one translation between pictorial and conceptual model and algebraic formula. Thus, with the computational formula, the student learns that there is some manipulation that yields a mysterious quantity, the sum of squares. With the definitional formula s/he learns how to find the distance from one thing to another thing in an intuitively obvious way, by subtracting the value of one from the other, squaring those values, and adding them up. Similar examples abound.

Even restricting oneself to definitional formulae is not enough. At times, when one definition is more easily pictured and related to common experience than the other, it is preferable to teach only selected versions of definitional equations. For example, we teach the Pearson correlation coefficient as the a function of the average difference between two variables (when both scores are transformed to z scores) rather than as the average crossproduct of z scores. That is, teaching correlation, we use the formula

$$r = 1 - 1/2 (Z_x - Z_y)^2/N$$

where r is Pearson's product moment correlation coefficient and N is the number of pairs of values.

We show, but avoid using, the formula

$$r = Z_x Z_y / N$$

because it is not obvious to most students that the degree of closeness of the z scores is represented by their crossproduct. Thus, the formula we use shows the student, each time s/he uses it, that a correlation is simply a function of the average distance between the standardized scores on two variables. The crossproducts formula does not convey that simple logic; so we don't use it. The idea in all of this is to have the student able to see the formula

geometrically and translate it into simple English each time he uses it.

The second conceptual change involved teaching statistics as a skills rather than ordinary academic course. If the use of statistical procedures is conceptualized this way a number of things follow. A primary instructional goal becomes having students believe that they can do what is required rather than that they can't. No skill can be easily taught to people who don't believe they can learn it (cf. Bandura, 1977). Second, we teach rules first and exceptions only after the rules are well learned. For example, in psychology the mean of a distribution is the most frequently used measure of central tendency. We start the course by teaching the mean. We ignore the median and the mode until we get to nonparametric applications, after the analysis of variance. Similarly, the interquartile range is mentioned at the same time as we discuss the median, when it is immediately useful to the student. Until that point in the course, only functions of the squared deviations from the mean are used as indicants of spread. And the assumptions underlying parametric statistics are not studied until the student is well familiar with what parametric techniques are.

Third, tools are only brought in when they are useful. For example, graphing is routinely taught at the beginning of statistics courses because it is a simple to employ, descriptive procedure. But early in most courses there is little or nothing that graphing helps the student understand. When the student is attempting to understand interactions in multifactor analysis of variance, graphs become very useful, pattern recognition devices. That seems the point to teach students to graph data.

Using this approach, we have been able to see some major changes in comprehension, retention, and enjoyment of the introductory statistics course at Rutgers. For example,

last semester, over 60% of the students got 80 or more points on a 90 point (tough) final. And only 6% of students dropped the course and another 6% failed. Although our evaluation of the change is still preliminary, we are highly encouraged by the results to date.

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INTRODUCING COMPUTERS INTO THE CURRICULUM

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This paper describes the establishment of a departmental computer laboratory and the initial efforts to introduce the use of computers into the Psychology curriculum. Selection of initial hardware and software is discussed. Integration of computerized activities into existing courses is explained. The content of a new course designed to teach uses of computers in Psychology is outlined. Problems, benefits, and future directions are explored.

INTRODUCING COMPUTERS INTO THE CURRICULUM

The first thing to notice from the title is that this is a dynamic process. We are still working on introducing computers into the curriculum. We feel that we have made a good start, but we have a long way to go. What I would like to do is to share with you where we came from, what we are doing, and where we hope to go. It seems a shame that everyone starts at the beginning and makes the same mistakes that have been made before. Perhaps pointing out our successes and identifying our problems will help other people who want to begin using computers in their departments.

Let me mention at the beginning that neither I nor anyone else in our department could be considered a computer expert. We simply believe in the computer as a teaching tool and have learned a lot by necessity, and trial and error (lots of error). A sub title for this paper could be "using the computer to teach Psychology". Our goal was to use the computer to teach concepts which could not be handled as well using any other method. We wanted to try to integrate the computer into existing courses and design courses where necessary to teach students about the power of the computer. We were not particularly concerned with the computer as a number crunching tool. We did not deal with how to use the computer as a means to analyze data or word process. We felt

that these were givens. We wanted to go beyond these uses and show the students how computers could be used to expand their involvement with psychological concepts.

First, a little of the history of personal computers at Plattsburgh. In 1981 the college had 10 Timex Sinclair computers. The college bought its first Apple computer that same year. In 1983 the Psychology Department bought its first Apple computer, making it the second one on campus. In 1984 the department bought its first of 4 Commodore 64s, creating its first computer laboratory.

The college currently has a laboratory of microcomputers in the library consisting of 21 Apples, 24 IBM PCs and 10 Commodores. In 1985 the college created the Office of Academic Computing. That office now houses a laboratory consisting of 20 Zeniths PCs.

In 1986 the college made funds from the Student Computing Access Program (SCAP) available to the various academic departments on a competitive basis. These funds are accrued through fees which each student in any SUNY school is required to pay. In the past this money had been used to support central computer services for the campus. The Psychology department submitted an application, and received \$10,000 of the available \$30,000.

The money our department received allowed us to set up the first departmental microcomputer laboratory on campus. The college supports both Apples and IBM/Zenith computers. We decided to go with IBM compatible hardware largely in the belief that Apples are used more in elementary/secondary schools and IBMs are used more in research and industry. We were a little hesitant because some of the software we were particularly interested in was only available for Apples. However, we feel that we made a good decision and that it has been proven correct in that much of the software has since been rewritten for IBMs. The recent introduction by Apple of a computer that is compatible with the IBM also seems to indicate that Apple feels that it can no longer maintain its isolationism.

Our grant money was spent on acquiring 4 Zenith 158s with expanded memory (640K), 4 color monitors, clocks and interfaces to control peripherals a printer and a plotter. Some minimal software was also purchased with the funds.

Before setting up a computer laboratory, you need to consider how it will be used. In some cases all that is needed is a computer with a large projection screen. This is particularly true if the computer is to be used for in-class demonstrations or group training. In some instances a large room with many computers (or at least terminals) may be the optimal situation. This would be particularly appropriate if

you are trying to gather data from numerous subjects, or if you are asking groups of students to perform the same task simultaneously. We envisioned our laboratory being used by students, either individually or in groups, to engage in assigned exercises independently of scheduled classes. To facilitate this kind of activity, we have a large room in which we can use a computer with a projection screen for group instruction. We also have 4 small rooms, each equipped with a computer. We feel that the small rooms are preferable to carrells as they allow privacy, yet enable students to work together. Many people have the misconception that working with a computer has to be an isolating activity. Our experience was that just the opposite occurred. Our students preferred working together in small groups. Eventually we would like to have these microcomputers networked together and connected to the college main frame via a DTI (Data Terminal Interface) modem.

Prior to the establishment of our departmental Zenith laboratory, computer use had been taught on a limited basis. Working on the college main frame, the research methods courses had used several statistical packages. Some of the junior seminars had used the Commodores to teach word processing. Additionally several faculty members use personal computers in their research, thus introducing a few students to computers in this context.

With the establishment of the new Psychology computer laboratory, our goal was to integrate the use of computers into more courses, exposing students to the use of the computer as a flexible tool. A tool that is useful not only for research and administrative functions, but also as a teaching aid.

The college currently has no computer literacy requirement, so there is no reason for students to be exposed to computers if they choose to avoid them. As I mentioned previously, there was already opportunity for students to learn to use the available statistical and word processing packages. What we wanted to do was to go beyond the traditional number crunching functions of the computer. We wanted to expose the students to some creative and innovative uses of the computer. We wanted to show them the power of the computer as a teaching tool. We wanted to demonstrate the flexibility of the computer and its potential to simulate laboratory equipment. We also wanted to get the students thinking about the direction in which computer use is moving in and the potential role this could play in the future of Psychology.

With these goals, we realized that we needed to vary our methods and requirements to the differing levels of student ability and interest. We identified three primary

groups of potential users and established goals and activities for each.

These three major groups of students were 1) students enrolled in the Introductory Psychology course, 2) students who were serving as teaching assistants (TAs) for the introductory course, and 3) upper level students who enrolled in a newly designed course, Computers in Psychology.

One of the first things to become obvious when considering the students, regardless of their level, was that there still exists a great deal of fear and resistance to the use of a computer. Many students had never used a computer and were hesitant to do so. This is where it was a decided advantage to have the computer laboratory in our own department. Students seemed to feel much more comfortable in this sort of sheltered environment. They were aware that there was always someone available (a TA or instructor) to help them get started and answer questions as they arose. While there is help available in the library laboratory, it is of a very general nature, and not geared to the specific use of the programs within the Psychology courses. This departmental system also allowed us a greater degree of control over student use of hardware and software, and enabled faculty to closely supervise student activity, teaching and encouraging in a manner that would have been

impossible if the students had simply been required to perform the assigned activities on their own in the library.

We considered our lowest level of student use, in terms of ability and requirements, to be the Introductory students. Most of these students were freshmen, and almost all had no computer experience. In the section of Introductory Psychology that I teach using a self-paced personalized system of instruction (PSI) format, students are required to earn a prescribed number of lab points. Last semester we offered computer simulated exercises or laboratory credit. Initially we used exclusively commercially available software, but found this to be inadequate so supplemented it with programs which we developed ourselves.

Our goals were to introduce the students to the use of the computer in a very passive, non-threatening manner, as well as to reinforce the material presented in the text. To this end, the software they were using was very basic; it usually required only that they insert the disk and turn the machine on (in some cases they did have to boot the system first). Most of the software was interactive and did require that the student input some information, but the required response options were usually specified in the program. This gave the students a feeling of actually interacting with the

computer and manipulating information, yet did not overwhelm them by requiring advanced computer skills.

We found that students at this level were initially quite intimidated at the prospect of using the computer. They were afraid that they would break the machine, be unable to make it work, erase software or cause some other catastrophies. I soon discovered that there is a magic phrase to remove these fears and get the student aggressively using the computer. The simple words "I have a back up of this software" seemed to give any student the license to use the programs without restraint. Many students came in quite hesitant about the prospect of engaging in a computerized experiment, but with the attitude that they would "try one and see how they liked it". At this point the selection of their initial exercise was very important. My TAs and I worked together to identify certain programs that should be recommended first. These programs were selected because of their high interest level, ease of operation, and quality of program design. The initial programs were used to build confidence and to introduce the students to the computer. Invariably the students enjoyed their first experience and would ask for other programs. Most of the students would refer to the exercises as "games". However, they did recognize the content material they were learning, as they would often refer to the parallel material in their texts. Our students became very adept at critiquing the

software both in terms of content and presentation, providing us with a thorough evaluation of our software. As a result of this initial exposure to the computer as a teaching tool, some of the students expressed a desire to learn to program their own simulations or demonstrations, particularly when they discovered that many of the programs they were running were developed locally by their instructor and not in some distant place by "experts". Normal people could do it too!

We certainly feel that our goals at this level were realized as numerous students were exposed to the computer in a relatively painless manner, and expressed a desire to continue their work along these lines. We also feel that the students who engaged in the exercises gained a deeper understanding of particular areas of Psychology. There was also the added benefit that working with the software stimulated group interaction. Several small groups developed that would routinely work on various assignments together.

A benefit for us was that we received a good evaluation of the available software from the students point of view. This enabled us to identify some serious weaknesses in the commercial software. As a result of this identification, a colleague and I currently have a grant to develop a computerized laboratory component to for Introductory Psychology. We will develop the software and accompanying

workbook of demonstrations, simulations and drills that will enable a laboratory of this sort to supplement an introductory section, or stand alone as a discrete laboratory co-

The second level of students we were concerned with were the TAs for the introductory course. We felt that these students needed to develop a greater range of computer skills, particularly in order to help the students enrolled in the course. Of the six TAs I had last semester, only one had any experience with computers, and that was with word processing. The other 5 had no experience and were all quite intimidated by using the computers. However, they realized that they had to learn how to operate the computers so that they could work with the students. Much of their first week was spent experimenting with the available software, finding out which programs they particularly liked and would recommend to students. The TAs were also a good source of evaluation of the programs, and identified many weaknesses in the software, particularly with respect to program design and operating instructions contained on the disks themselves.

There was a lot of confidence building evident in the TAs. They were very quickly using jargon and were viewed by the students as "experts". It was nothing to hear TAs who only a week before had been overwhelmed by the thought of

using a computer saying things like "OH yes, you need to boot DOS to use that d , and the password is..". The TAs began to view the computer as a valuable tool for teaching difficult concepts. Through their work with the students the TAs identified several problem areas in the course content and suggested development of programs to supplement those sections. They were also realizing the potential of the computer in terms of course management and by the end of the semester were suggesting ways that the computer could be used to maintain records, administer and score quizzes, etc.

A related benefit of the TAs introduction to the power of the computer is that this semester a few of them are working in upper level courses and helping to integrate the computer into those courses.

Our upper level of student involvement with computers was in a special topics seminar on Computers in Psychology. Our only requirements to enroll in this course were Introductory Psychology and research methods; no prior computer experience was required. We were quite ambitious in the design of this course. We wanted to have a theoretical orientation, to introduce students to current uses of the computer in various areas of Psychology. We also wanted to include an applied component in which the student would actually learn to write programs.

The conceptual areas we wanted to cover were simulation; modeling; real time control of experiments; artificial intelligence; use of computers in clinics (for test administration and diagnosis); and CMI/CAI. We did not want to cover the more traditional uses of the computer such as analyzing data or word processing, as we felt those areas were covered elsewhere.

The format was the same for all the units. We would assign certain introductory readings (we found we had to use current journals as there was no one text that covered all the areas). We would have a guest lecturer cover his/her area of expertise. The students would write a paper dealing with the current literature and their reactions to it. The final meeting of each unit consisted of a group discussion based on the student papers. We found that this format generated a really thorough review of the literature. It also forced the students to think about and question the current uses and future directions of computers in Psychology.

The applied component used BASIC to teach the fundamentals of programming (design, flowcharts etc.); the use of color, graphics and sound; collection and storage of responses; and methods of data analysis (programming our own statistics rather than using canned packages). As a final project for this component, students had to produce an

original program incorporating all of the above elements. These projects reflected the students' prior experience in that some were stronger in the programming aspect while others were superior in their Psychological content. While none of these programs would be useful in their current form, the students had made a considerable first step.

The students entered this course with very diverse backgrounds. Some had minimal experience with word processing, and a few had considerable knowledge of programming. As the semester progressed it was interesting to watch the students attitudes change as they were exposed to more material concerning the use of computers. Some students wholeheartedly embraced the computer as a useful tool, while others were very apprehensive about the power and potential for abuse inherent in the computer.

We feel that we have accomplished a great deal in the past year, but we realize that we have a long way to go. Some of our future goals include:

- Developing our computerized laboratory component for Introductory Psychology.

- Developing a computer management system for Introductory Psychology (especially for the PSI section).

-- Increasing the use of computerized activities (labs, simulations, demonstrations, etc.) in the upper level courses. Some attempts were made to incorporate our current software into courses, but it was evident that the materials we had were not suitable for this kind of activity.

-- Establishment of an advanced course dealing with computers in Psychology. We would like to base this on the experimental course we offered last semester. However, we would like to see it expanded to a two semester course to enable more extensive coverage of the material and allow for development of superior software.

-- The participation, with faculty, of more students in research which involves active use of the computer. Particularly in research which demands writing original programs.

These goals would have the effect of expanding our current three levels of student activity to five levels. 1) introductory students 2) students in upper level courses 3) TAs for the introductory course 4) students in the Computers in Psychology seminar and 5) students engaged in independent research using computers.

We realize that these are ambitious goals. We believe however that there are several factors working in our favor. One of the biggest hurdles we identified to the successful integration of computers into our curriculum was the absence of appropriate commercially available software. New commercial software is constantly being developed, and we are confident that this, plus our efforts to develop our own materials, will remove this obstacle. We are also very encouraged by the self-perpetuating nature of working with the students. We are now seeing students who were exposed to computer use last semester taking, or TAing for, upper level courses. These students are already familiar with the hardware and software and realize the potential value of the computer as a teaching tool.

Our accomplishments to date have not been easy. It is a very time consuming project to incorporate the use of the computer, even for just one activity, into an established course. It may require the redesign of the course format, locating commercially available software, or writing original programs. This means that the instructor must often develop new computer skills. It demands that each faculty member be not only a discipline specialist for content material, but also a learning theorist for course design and a computer programmer. Then, of course, there is the actual time it takes to write the programs (it is estimated that it takes 100 hours to produce 1 hour of useable programming).

Some of the problems I have just mentioned can be avoided, or at least reduced if faculty can work in teams to complement each others weaknesses. It is also very advantageous to have one member of the department who is seen as the "expert" and is willing to help colleagues as it becomes necessary. This key person can also serve as a liaison between the academic department and the computing staff, helping to keep the department abreast of new trends and filtering out unnecessary questions aimed at the computer department.

If it is so difficult in terms of time, expertise, available materials, etc., why integrate the computer at all? Where is the need to use the computer in classes?

The answer to this question takes you beyond the obvious uses of the computer as a course manager, number cruncher, or word processor. You have to consider the computer's potential as a teaching tool. It has the ability to present material which otherwise would be unavailable to the student. It can simulate the function of equipment which would be inaccessible due to its cost, size, sensitivity or other restrictions. It allows the student to replicate classic experiments, or create original ones without the restrictions of finances, subject pools, or ethical constraints. It enables students and teachers to manipulate

material in a manner never before possible. And it does all of this without losing its patience or getting frustrated.

Affective Teaching - Issues we should reconsider

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Abstract

When first asked, "How do you know when you are an effective teacher." I said, "I just know, sometimes it works and sometimes it doesn't." I think my first reaction remains accurate, but after further consideration I realize the question might best be answered by considering the following three time perspectives: (1) immediate (e.g., class-by-class); (2) intermediate (e.g. exam-by-exam, section-by-section) and; (3) long-term (e.g., end of the semester, the rest of the student's life). There are several factors I consider in order to evaluate how I am doing at each of these points in time. Several of these will be discussed.

Affective Teaching:
Issues we should reconsider
Linda L. Dunlap
Marist College

Let me indicate from the onset I will not be telling you much today you don't already know. My goal is to resensitize you to some issue that we may too often overlook. I am concerned that we forget or are afraid to admit that most of us were never formally taught how to teach. I am not saying that all aspects of effective teaching can be taught. Certain aspects can probably only be acquired or somehow simply appear; that is, we either "have it or we don't." I also assume that you feel as I do, that we have received very fine educations, which have helped prepare us for our teaching. But, most of us moved almost overnight from the role of a student receiving knowledge to the role of a teacher dispensing knowledge. It can be, or was, or at times still is, a difficult transition. For others, we've been in teaching (on the other side of the fence) for so long that we may have lost sight of how it was to be a student. I think we need to try to always keep the student in sight. Are we sitting way upon our celestial thrones dispensing knowledge?

I may have been one of the lucky ones, since I was given an opportunity to work as a teaching assistant for my last two years in graduate school. Since I lectured and tutored, I was to some extent "taught" how to teach. I am afraid that this type of experience is all too rare and I know that I could have

benefited from even more time in this less crucial teaching role. (Perhaps we should consider an adopt a peer or new faculty program.)

I think, we as teachers, should spend more time sharing and talking about effective teaching. I know that I can still benefit greatly from the insight of successful teachers. For example, some crucial areas in which most of us could benefit from a sharing of knowledge are:

- . What factors contribute to making an effective lecture?
- . What are the most appropriate forms of evaluation?
- . What are effective ways to provide feedback to students?
- . What are reasonable criteria for determining course grades?

There are other less crucial, but still important, insights which could also be helpful, such as:

- . How does one teach four classes, attend meetings, meet with students, work on committees, and still maintain the quality of each activity?
- . How can I keep examination materials secure?
- . How can I prevent or deal with cheating?
- . How do I best organize, maintain, and report grades and attendance?

Please don't be dismayed and say "If she doesn't know these things, she shouldn't be teaching!". I feel that I do a good job, but I also feel that we can all aspire to do even better.

I have learned how to do many of these things through the modeling of teachers that I have had in the past. I have also learned much through trial-and-error (not always the most effective way of acquiring skills). I have also learned through open asking of questions of my peers and watching my peers in action. It has probably been this information that has been the most valuable. I firmly believe that I still have more that I can learn from you and my colleagues at home. At the same time, I hope that I will be encouraged to share my experiences as well with my colleagues. When I'm forced to talk about it, I find myself reflecting on it more and perhaps more accurately. My hope is that we all would begin to encourage this type of exchange on a regular basis and, that by doing so, we can increase our effectiveness as teachers. Imagine using a faculty meeting to talk about good teaching rather than just administrative matters. Imagine even a weekly memo including: this is what works and even perhaps, this is what didn't work.

The key to answering the question "How can learning be best fostered" may be found by first addressing the question of "How can we learn what will help us to better dispense the knowledge that we all have?"

When first asked, "How do you know when you are an effective teacher." I said, "I just know, sometimes it works and sometimes it doesn't." I think my first reaction remains accurate, but after further consideration I realize the question might best be answered by considering the following three

time perspectives: (1) immediate (e.g., class-by-class); (2) intermediate (e.g. exam-by-exam, section-by-section) and; (3) long-term (e.g., end of the semester, the rest of the student's life). There are several factors I consider in order to evaluate how I am doing at each of these points in time. Let me mention just a few of them.

Immediate factors - (class-by-class--perhaps a class teacher log or diary might be worth keeping for a while)

These factors may be the hardest to formally measure but perhaps are the easiest to "feel".

- (1) Type of question asked. Are the students only asking for clarification (asking me to repeat what I've already said) or do they also ask questions which are extensions (relating what I am teaching to other areas, etc.) of what I have taught? Ways to help insure they are asking the "right" kinds of questions". Tie things together, avoid making each lecture an island in itself; ask yourself at the onset of class what you hope to accomplish and try to stay on track; ask them questions. Warn them what you will be doing next class. Ask them to be prepared. Ask them to come in with some "good" questions. How do I respond to their questions? Do I encourage them to find answer or do I give it to them. How do I respond to a good question and/or discovered answer?
- (2) Diversity of student participation. I hope most if not all my students will participate in class discussion or

informal conversations before and after class." Set them up" by saying something wrong occasionally or making a controversial statement. I find my students are more likely to talk if I can call them by name (nod of head, laughter, frowns) is participating.

- (3) Clock watching. Do the students pack up their belongings 10 minutes before class is over, dart out the door at the conclusion of class, or arrive late on a regular basis? What does this say to us. Perhaps even more important, do I clock watch and think, "Isn't it over yet?" I really am satisfied when class runs overtime and nobody notices. Sometimes we need to know when to quit. But, I also think we need to respect the possibility that the student may have another class and not keep them overtime regularly.
- (4) Voluntary attendance. Do I keep them coming back class after class without major threats of grade deduction? When they know I take attendance and note whether they are on time or not I don't seem to have an attendance or tardiness problem, even when it's not a part of their grade. I think we all need to be kept accountable. If they're late I ask them to be late rather than not come. I ask them to be courteous enough to provide a brief explanation at the close of class.
- (5) Active versus passive listening. Are the students reading or preparing other classes materials, writing letters,

day-dreaming, talking, eating, or sleeping? Did they adequately prepare for this class? Statements like, "I wonder if this would make a good exam question," are good attention getters. Sometimes my students seem to enjoy class too much and don't take as many notes as they should. When I go to the board and write it down most students write it down too.

- (6) Staying on track. Did I cover the material I had hoped to complete? What did the students learn today? What did I learn? Did I adequately prepare? We should try occasionally to run the imaginary video back on ourselves and be brave enough to self-criticize and ask ourselves if we would have learned anything in class today or enjoyed class today. Set objective for yourself as well as for your students (Problem of only meeting objectives).

Intermediate factors

- (1) Student performance. Are the students gaining the knowledge I am trying to teach? This can be evaluated in several ways including papers, exams, presentations, etc. Do the students need to be in class, read course material, etc. to do well in this class? Are the students who never come to class or never participate doing better or just as well? It's hard to decide which is the best method of evaluation. I like diversity and my students seem to also. Young students need frequent evaluation (so all is not lost or

wasted on a "single exam or paper). I like to acknowledge that certain students are good with facts and detail and others are better with integration, some are better writers, etc. I do think we are obligated to have our students write. What good does it do to gain all this wealth of knowledge if we can't share it written or orally.

- (2) Student satisfaction. I often allow my students to do mid-term course evaluations. Why not make effective changes in the class you are currently teaching rather than wait until next semester? Each class of student is different and unique and perhaps needs some adjusting to. We tell the students to adjust to each of our styles. Some give on our part may be quite beneficial. I also directly talk with students on a regular basis, asking about what they like and dislike about the class. I think its important to ask students what they'd like to accomplish in class. Occasionally it may be wise to save five minutes at the end of class and ask the students to "react to today's class."

Long Term factors

- (1) Re-enrollment. Do the students enroll in other courses in my discipline after they've had me? Do they enroll in other of my classes or encourage their friends to do so? Are they enrolling in my classes for the right reasons? If I can hear comments like "She's tough but fair" and "I learned a lot", I am well pleased.

- (2) Formal feedback. What do the students have to say about my class on the student course evaluation forms? I am going to react to or act upon these evaluations. How do my superiors and colleagues evaluate my courses?
- (3) Informal feedback. Do I later hear from the students how my course material helps them in another course or even better, in life? Do my colleagues tell me they are hearing good things.

Last-but-not-least, I find myself evaluating all three of these perspectives when I get brave enough to ask myself, "If I were a student in this course, would I feel like I learned something and would I want to attend on a regular basis?"

Allow me to allude to some other teaching tips:

I. Course outlines:

A. Give them complete information about your class

1. Attendance
2. Assignments
3. Exam type
4. Paper description(s)
5. Project description
6. How you grade
7. Make-up assignments.

(If it's important to your class; write it down.)

II. Disclose some information about yourself

1. What interests you (academic and otherwise)
2. What bothers you
3. Ask them what they've heard about you

III. Cheating, plagiarism

1. If you're concerned about it, tell them you are concerned and what you're prepared to do if it occurs. Find out the rules of your college and support them.
2. Know the tricks (cheat sheets, writing on desk tops, extra exam booklets, information written on cups and cigarette packages). Here's where your colleagues can help out.
3. Keep exams secure (alternate forms, think about where you store exams; and throw rough drafts away).
4. Unambiguously define plagiarism for them.
5. Reduce pressure by not making examinations worth so large a proportion of their grade.
6. Provide review lists (pros and cons).

IV. Returning assignments and exams

1. Be organized and stay on top of things (model what you preach). I write out a master calendar to keep in perspective what's to come.
2. Return material quickly; so they can make appropriate adjustments quickly. (Why do we evaluate?)
3. Jumping-on-the-bandwagon phenomenon when going over test results. Taking up a 2nd class period going over exams.
4. Have students write down grade complaints.
5. Do item analyses.
6. Try taking the exam yourself or have a grad student or fellow professor take or look over the exam.

V. Special circumstances; what to do and how to prepare.

1. Death of spouse
2. Roommate attempted suicide
3. Child dying of cancer
4. Days when I'm down
5. When the equipment doesn't work
6. Forgot my lecture notes.

In conclusion, as I stated from the onset, "Nothing new under the sun." I hope some of what I mention gets you thinking about some things you haven't considered for a while. I hope it gets you talking with your peers.

ON THE USE OF PROCESS IN EDUCATION

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ABSTRACT

On the Use of Process in Education

Apprehension best describes my thoughts about using process with a non-analytic population, and curiosity about the success of such an approach. Several modifications were made and class began. My experiences were, at times, supportive of any expectations, and at others, quite contrary to them. Following is what I have learned.

Using process in the average class, one might find the first class doing something like this: the instructor enters the classroom and introduces himself/herself, identifies the course and then asks, "What would you like to talk about today?". The students, rendered uncomfortable by the ensuing silence, after a few minutes, usually begin to speak. The first session (unless it is a class of analytic students) generally does not accomplish much. Questioning tends to center around whether or not the professor intends to lecture. Students often leave the first class quite confused. Sometimes they feel cheated, sometimes guilty, at best they do not really understand what has taken place. Had they experienced grammar school education where they had been encouraged to think rather than repeat, they might have shifted gears somewhat and engaged their own resources. This reaction speaks for traditional education in this Country and in many others. Traditionally, education in this Country has consisted of a passive method: lectures by an instructor, readings from some sort of text, and testing on either or both of those sources. Occasionally, a paper and/or class participation enhance the final grade. As a result of this passive-receptive pattern of learning, when the student is required to rely on themselves and their own bank of knowledge, it takes a significant period of time for the student to mobilize him/herself in order to retrieve, process and present the information. An introduction is beneficial. It is helpful to begin by explaining that the instructor knows the material, and to lecture to students on something that they can read for themselves, is both insulting and wasteful. It is also helpful to explain that the students themselves have had nearly 20 years (or more) of life's experiences and based on that, as well as the fact that they are now involved in higher education, we have a lot to learn from each other. Due to the general educational system in this Country, objective evaluative criteria are necessary. The students are reminded that there will be tests on reading material and a paper due, as well. If there are questions about textual material, they need to be brought up in class. They are then encouraged to relax and to try to enjoy an alternative learning experience. If no one offers any comment, the instructor can ask, "So, what would you like to talk about today?". Depending on the individuals in the class, one may comment or the instructor may need to "pick on" a few individuals whose faces may betray their thoughts. Usually, this "drawing in" of students begins some process (it is also helpful to sit in a circle facing each other). Characteristically, for the first sessions, there are long silences, and the question will be repeated each time, "when is lecture to begin?". Asking why they would like lecture is also an effective catalyst.

Three or four sessions into the course, some students will drop. Of those who remain, all but a few will begin to participate. There is always at least one person in the class who feels compelled to mention textual material on a regular basis, so the reading is covered. Tests hold no trick questions, only straight-forward material and little rote, but much application of textual material.

A trust develops, most students relax and profess to enjoying this alternative style of learning. In many ways, a healthy, low anxiety environment for learning is created. They feel good about themselves, have taken responsibility for what transpires.

In my teaching experience, I have used process with both inmate and typical student populations. there is little basic difference between the responses of the two. It is my opinion that education has failed to stimulate students to be creative, to produce, to learn and to like learning. While rote and lecture are appropriate for some subjects, they are methods which for other subjects, enslave rather than liberate and cultivate the mind's potential. I propose that if process or similar methods, presently under-utilized, could be employed appropriately, then we (as educators) would perform a greater service to each student and to the field of education.

ON THE USE OF PROCESS IN EDUCATION

I come to you today with an idea that is new (to us) but is really very, very old. It is the idea of teaching through the use of process. Socrates taught that self-study was important - it was a good idea then, and is now....Especially at a time when education is increasingly prepackaged into neat modules and fed to the consuming student. Nothing is requested in return except for the regurgitation of the consumed material, not creativity, not originality, not even a student's thoughts on the material. I feel the result of all of this is atrophy. Students are stumped when they are asked to create and to contribute. Those brain cells are rusty - not dead - yet. My position is this: it is our responsibility, as educators, to stimulate students to think, not to provide the answers on a platter; to motivate students to discover, not spoon-feed - for as we spoon-feed, we help to cripple our next generation of thinkers.

I don't profess to have the answer, but I do feel that the method of process is a progressive and valuable step for some, not all, courses, and I would like to share with you my experiences with it; use in the classroom.

Process has been and is currently used in psychoanalytic institutes; perhaps the method is best known in that setting. I held a fair amount of apprehension about using it with a non-analytic population - would it work? Would they even know what I was talking about? Some modifications were made and class began. At times my experiences were supportive of my expectations and at other times, contrary to them.

Using process in the average class, one might find the first class going something like this: the instructor enters the classroom and introduces himself/herself, identifies the course and then asks, "What would you like to talk about today?". Students, rendered uncomfortable by the ensuing silence, after a few minutes, usually begin to speak. The first session, unless it is a class of analytic students, usually does not accomplish much. Questioning tends to center around whether or not the professor *intends* to lecture. Students often leave the first class quite confused. Sometimes they feel cheated, sometimes guilty, at best they do not really understand what has taken place (or has not taken place as some see it). Had they experienced grammar school education where they had been encouraged to think rather than repeat, they might have shifted gears sooner and engaged their own resources. This reaction speaks for traditional education in this Country and in many others. Traditionally, education has consisted of a passive method: lectures by an instructor, readings from some sort of text, and testing on either or both of those sources. Occasionally, a paper and/or class participation enhance the final grade. As a result of this passive-receptive pattern of learning, when the student is required to rely on themselves and their own bank of knowledge, it takes a significantly larger period of time for the student to mobilize him/herself in order to retrieve, process and present the information.

Very often, I will try to ease the transition by explaining that the instructor knows the material and to lecture to students on something they can read for themselves is both insulting and wasteful. It is also helpful to explain that the students themselves have had nearly 20 years (or more) of life's experiences and based on that, as well as the fact that they are now involved in higher education, we have a lot to learn from each other. They are being asked to have confidence in themselves and what they have to say, as well as to take responsibility for their learning. Both of these go against the grain of traditional education, which places the student in the position of an ignorant sponge and the professor in the position of the omniscient one, dropping pearls of wisdom. Let's encourage our students and give them some credit, some confidence!

Due to the structure of the educational system, objective evaluative criteria are

necessary. The students are reminded that there will be tests on reading material and a paper due, as well. If there are questions about the textual material, they need to be brought up in class. They are encouraged to relax and enjoy an alternative learning experience. If no one offers any comment, the instructor can ask, "So, what would you like to talk about today?" Depending on the individuals in the class, one may comment or the instructor may need to "pick on" a few individuals whose faces may betray their thoughts. Usually, this "drawing in" of students begins some process (it is also helpful to sit in a circle facing each other). Characteristically, for the first few sessions, there are long silences, and the question will be repeated each time, "when is lecture to begin?" Asking why they feel lecture is necessary is also an effective catalyst.

Three or four sessions into the course, some students will drop. For those who remain, all but a few will begin to participate. There is always at least one person in the class who feels compelled to mention textual material on a regular basis, so the reading is covered. Tests hold no trick questions, no obscure facts or trivia, only straightforward material and little rote, but much essay and application of textual material.

A trust develops, most students relax and profess to enjoy this alternative style of learning. In many ways, a healthy, low anxiety environment for learning is created.

In my teaching experience, I have used process with both prison inmates and typical student populations. There is little basic difference between the responses of the two. It is my opinion that education has failed to stimulate students to be creative, to produce, to learn and to like learning. It is my hope that the use of process in some situations may change some of that. While rote and lecture are appropriate for some subjects, they are methods which for other subjects, enslave rather than liberate and cultivate the mind's potential. I propose that if process or similar methods, presently underutilized, could be employed appropriately, then we (as educators) would perform a greater service to each student and to the field of education.